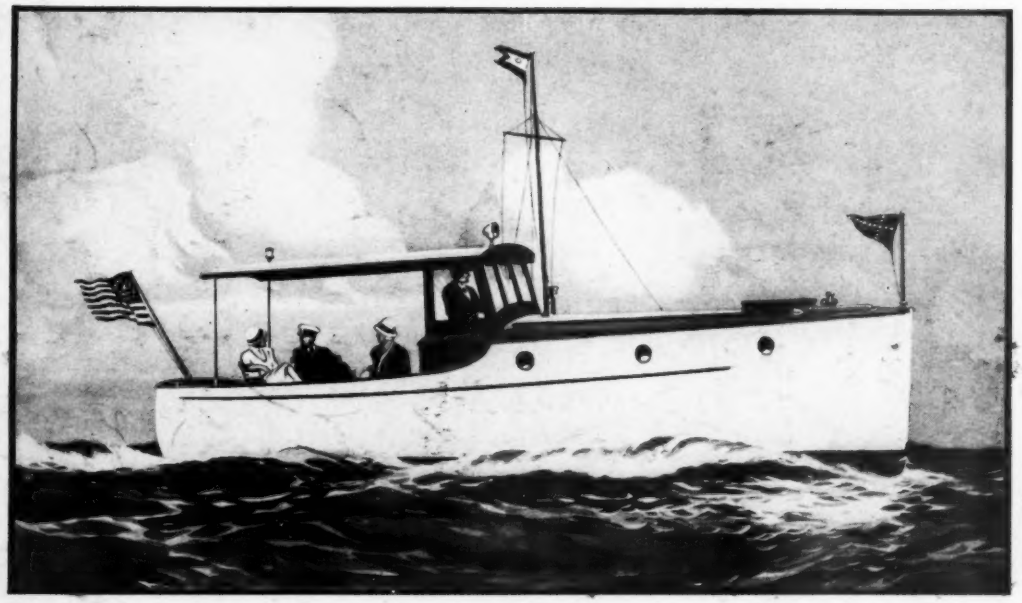
MOTOR BOATING

The Yachtsmen's Magazine

July 1928

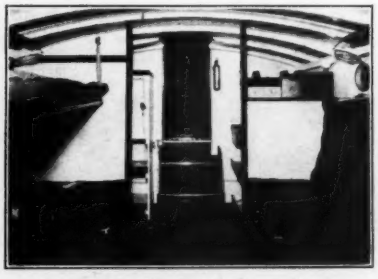
35 Cents

26 *feet... and big enough*



THE designers of the Elco Twenty-Six know that full-sized human beings are going to use the boat—so it is designed for persons of normal tonnage and displacement. You don't camp out with an Elco—you live in it. Room for your clothes—room for your food—room for you. The Twenty-Six runs easily as an automobile, is not gasoline-greedy, and is safe always and everywhere. Come around to Port Elco and look over the new Elco Twenty-Six—or write for Catalog MG with complete information on the Elco 1928 fleet.

Sleeping on the Twenty-Six is like sleeping at home—but much quieter. Four comfortable berths and lots of locker space. Sound sleep and sea breezes!



You have plenty of room in the Twenty-Six cabin—room to stand up, room to lie down, room to turn around in.

The entire Elco 1928 fleet is permanently on display at Port Elco, 247 Park Avenue. We should be glad to have you call and go over every boat in detail.

The 1928 Elco Fleet

Twenty-Six	$ 2,975
Cruisette	5,950
Thirty-Eight	10,750
Forty-Two	15,500
Fifty	25,500

Elco
THAT MARK
MOTOR BOATS

The Elco Works...
PORT ELCO (Permanent Exhibit)
247 Park Avenue, at 46th Street,
New York
Distributors in Boston, Detroit, Los Angeles and Miami

Over half of all the Outboard motors that are sold are Johnsons

Sold On Free Trial and Time Payment Plan

JOHNSON MOTOR COMPANY, 3063 Pershing Road, Waukegan, Illinois

Export Division, 75 West Street, New York City

IN CANADA

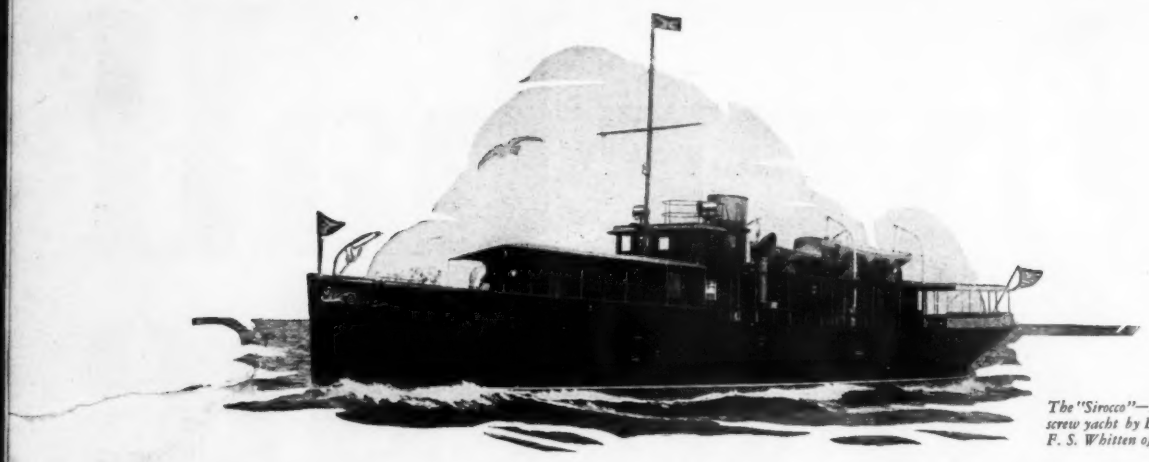
Canadian Johnson Motor Company, Ltd., Peterborough, Ontario

Distributors: Peterborough Canoe Co., Peterborough, Ont. - Hoffars, Ltd., Vancouver, B. C.

Johnson
Outboard Motors

WORLD'S LARGEST MANUFACTURER OF OUTBOARD MOTORS

MoToR BoatinG, July, 1928. Volume XLII. No. 1. Published Monthly at 57th Street at Eighth Ave., N. Y., U. S. A., by International Magazine Co., Inc. Yearly subscription price: United States, $3.00; Canada, $3.00; Foreign; $4.00. Entered as second-class matter April 15, 1925, at the Post Office at New York, under the act of March 3, 1879. (Printed in U. S. A.)



The "Sirocco"—120-ft. twin-screw yacht by LUDERS for F. S. Whitten of New York.

These Ocean-going Palaces by LUDERS

Protected with EDWARD SMITH Paints and Varnishes

WHAT more fitting tribute to the genius of the LUDERS MARINE CONSTRUCTION COMPANY could one find than the type of men who are proud owners of the palatial yachts shown on this page?

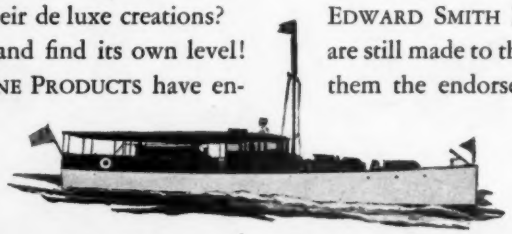
What more fitting tribute to the quality of EDWARD SMITH Marine Paints and Varnishes could one find than the fact that these renowned builders use SMITH materials to beautify and protect both interiors and exteriors of their de luxe creations?

Truly, quality does seek and find its own level!

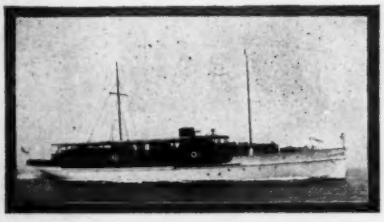
Since 1827 SMITH MARINE PRODUCTS have enjoyed a position of leadership among experienced boat owners and builders.

These fine products have always been made to highest standards, rather than to meet competitive market prices. Only finest fossil gums and pigments are used in their manufacture; only natural ageing methods are employed to give them the qualities which have made them famous for beauty and durability.

Today, after more than a hundred years, EDWARD SMITH MARINE PAINTS AND VARNISHES are still made to the same standards which have won them the endorsement of the marine world over this long span of time.

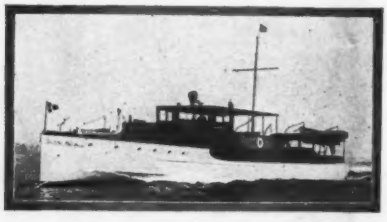


The "Toxaway"—65-ft. cruiser by LUDERS for J. H. Nunnally of Atlanta, Ga.



The "Zapala"—124-ft. Diesel cruiser by LUDERS for Howard E. Coffin of Detroit, Mich.

The "Uanl"—42-ft. cabin runabout by LUDERS for Dr. C. H. Muncie of Brooklyn, N. Y.



The "Amida"—80-ft. cruiser by LUDERS for E. R. Berbend of Erie, Pa.

EDWARD SMITH & COMPANY

LONG ISLAND CITY, N. Y.

Manufacturers of Marine Paints and Varnishes Since 1827

Advertising Index will be found on 3rd last page

7 New World's Records with DUPLEX OUTBOARD SPECIAL

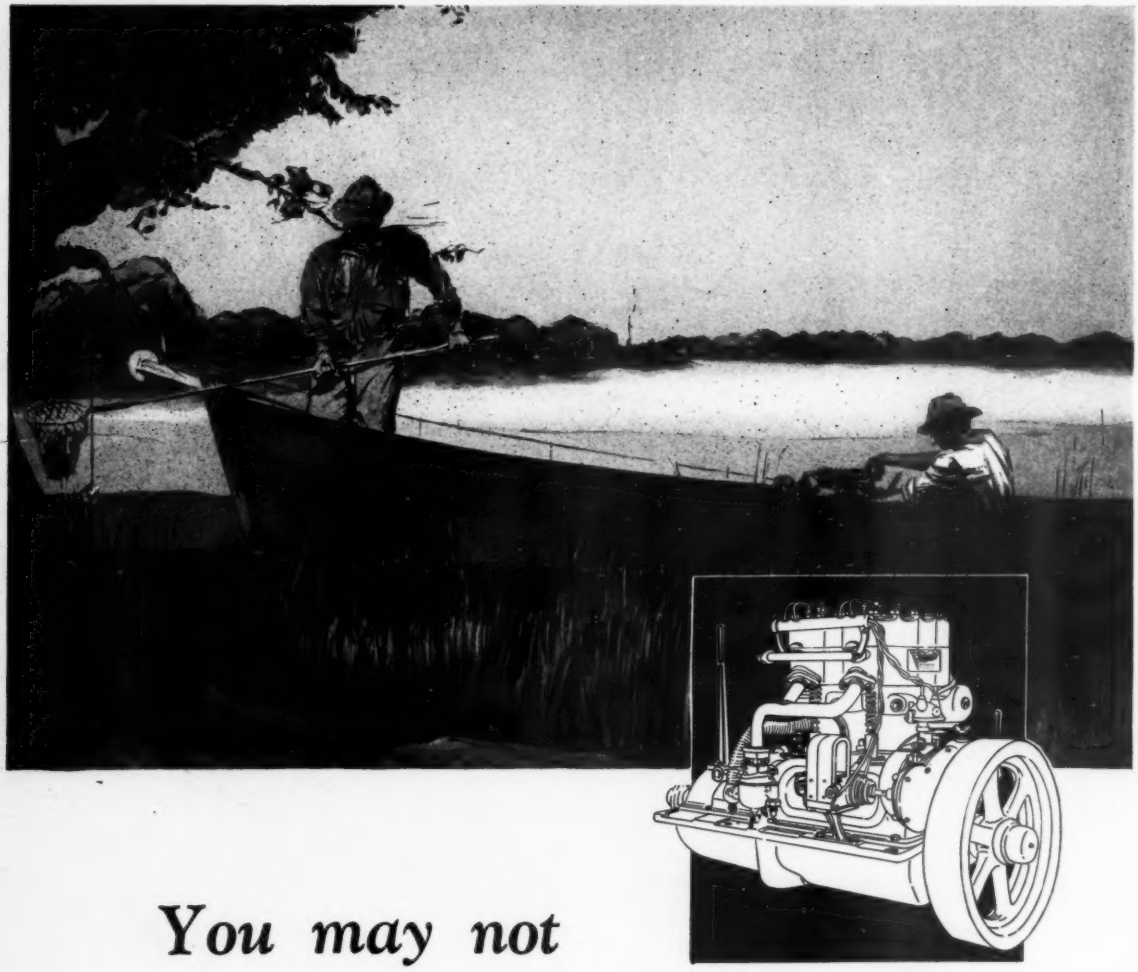
On May 29th at Lake Quinsigamond, Worcester, Mass., the OUTBOARD SPECIAL grade of Duplex Marine Engine Oil was used by *every winning boat.* Seven new world's records were established, including the fastest mile ever traveled officially by an outboard. *There was not one single case of engine failure where Duplex was used.*

Thus in its first public presentation, the new member of the Duplex line not only made a perfect record, but proved that Duplex is the one oil relied upon *by those who win races.*

If you would like the full story of that wonderful day's racing at Worcester just ask us for a copy of the "Lake Quinsigamond edition" of The Duplex Dealer—mailed cheerfully to all interested in the outboard sport.

ENTERPRISE OIL COMPANY, Inc.
Established 1884
BUFFALO, NEW YORK

Wholesale District Distributors in New York, Boston, Philadelphia, Miami, Cleveland, Detroit, Chicago, St. Louis, Houston, San Francisco, Vancouver
Dealers wherever boats float



You may not ....be a crabber

But you do want power aplenty to drive your craft smoothly and swiftly through the open water and to throttle down instantly for the landing or when passing through the congested passage. In short, you want power *and* flexibility. All Palmer Engines have these and more besides.

That is why the Chesapeake crab fleet has so many Palmers. Why not follow the lead of the professional? *He knows.* He demands not only power and flexibility, but accessibility, dependability and economy as well.

Palmer engines satisfy them. They will satisfy you too.

Palmer Brothers Engines, Inc. Cos Cob, Conn.

The Palmer Line

YT1—1-cylinder	2 h.p.
PNR1—1-cylinder	6 h.p.
PNR2—2-cylinder	12 h.p.
PNR3—3-cylinder	18 h.p.
PNR4—4-cylinder	24 h.p.
ZR1—1-cylinder	7 h.p.
ZR2—2-cylinder	18 h.p.
ZR3—3-cylinder	30 h.p.
ZR4—4-cylinder	40 h.p.
F2—2-cylinder	18 h.p.
F3—3-cylinder	25 h.p.
F4—4-cylinder	35 h.p.
F6—6-cylinder	50 h.p.
NK2—2-cylinder	25 h.p.
NK3—3-cylinder	35 h.p.
NK4—4-cylinder	50 h.p.
NK6—6-cylinder	80 h.p.
VH—4-cylinder	14 h.p.
VHL—4-cylinder	20 h.p.
Little Huskie, 4-cyl.	15 h.p.
Power Boy Six, 6-cyl.	40 h.p.

Distributors

New York, N. Y.,	89 Third Av. at 12th St.
Baltimore, Md.	306 East Lombard St.
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Norfolk, Va.,	Gas Engine and Boat Corp.
Jacksonville, Fla.,	122 South Ocean St.
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Miami, Fla.,	B. E. Shubert 1008 North West 8th St. Road
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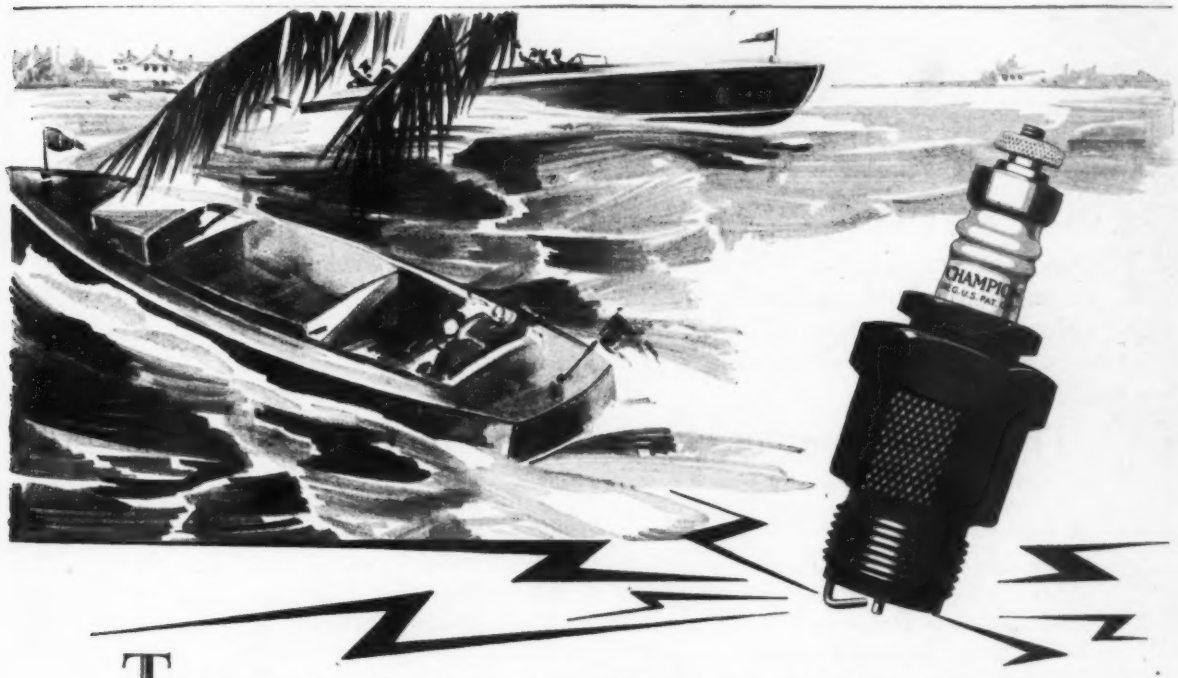
Vancouver, B. C.,	V. M. Dafoe Co., 1100 Powell St.

PALMER

Advertising Index will be found on 3rd last page

To enjoy Motor-Boating install New Spark Plugs



To insure ideal and carefree marine engine performance during the summer boating months, install a complete new set of Champion Spark Plugs. They restore maximum speed, power and flexibility and save gas and oil. Your motor boat will perform better under all boating conditions.

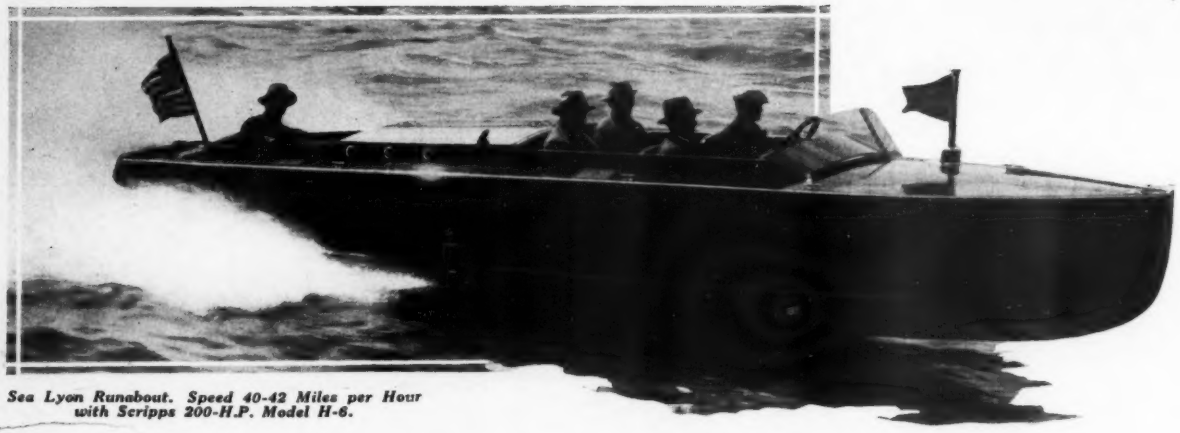
Champion is the better spark plug because of definite structural and operative superiorities exclusive to Champion.

The exclusive sillimanite insulator is specially treated to withstand the much higher temperature of the modern high compression engine. Sillimanite is exclusively Champion's because Champion controls the only commercial deposit known. It is recognized as the most efficient insulating material known to ceramic science. The new patented copper gasket seal remains absolutely gas tight under high compression. Special analysis electrodes assure a permanently fixed spark gap under all engine operating conditions.

It is for these reasons that you can buy dependable Champion Spark Plugs with every assurance of better and more economical marine engine operation. There is a correctly designed Champion Spark Plug for every marine engine.

CHAMPION
Spark Plugs

TOLEDO, OHIO



Sea Lyon Runabout. Speed 40-42 Miles per Hour with Scripps 200-H.P. Model H-6.

Sea Lyon 26-Foot Runabouts and Sedans

IF you want a runabout or sedan in the 26-foot class that is the last word in quality and value, come in and arrange for a demonstration ride in the Sea Lyon. Compare it in performance, finish and price with every other boat of its size on the market. Its equal has never been built, considering the quality of design, materials, workmanship, speed and seaworthiness.

The Most Complete Line of Runabouts in New York

Our permanent display at Hotel Barclay is maintained for your convenience. And our own Service Station at City Island insures continued satisfaction for Lyon patrons. Orders should be placed without delay if you want to use your boat this summer.

26-ft. Sea Lyon Runabout	**$4,000**	**26-ft. Dolphin Jr.**	**$4,275**
26-ft. Sea Lyon Sedan	**$4,600**	**24-ft. Baby Dolphin**	**$2,975**
29-ft. Hacker Dolphin	**$4,950**	**12-ft. Laconia SpeedSter**	**$300**
29-ft. Dolphin Sedan	**$5,850**	**16-ft. Laconia SportSter**	**$475**

Prices quoted f.o.b. factory

Lyon Electric Anchors : Johnson Outboard Motors : Chenevert Corsair Cruisers : Robinson Cruising Express

Write or telephone for descriptive literature.

HOWARD W. LYON

INCORPORATED

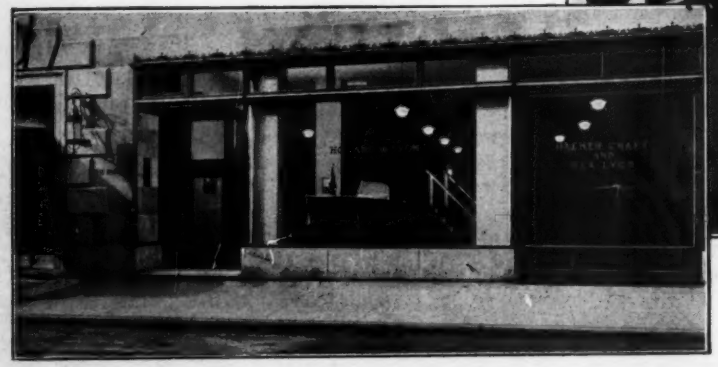
HOTEL BARCLAY

532 Lexington Avenue (at 49th Street)

NEW YORK, N. Y.

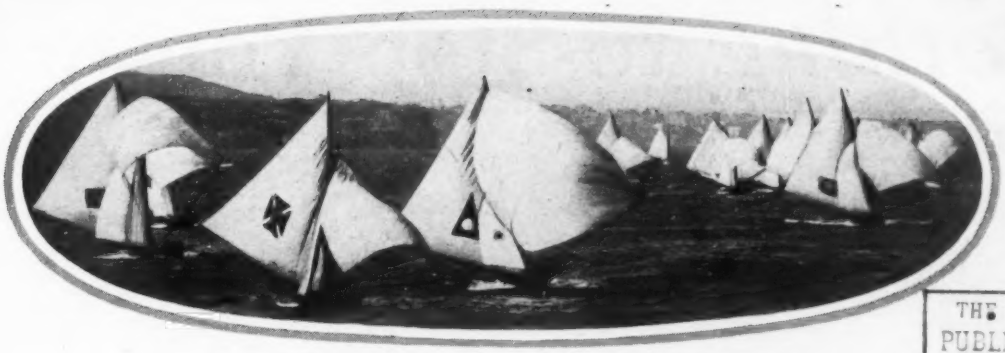
Telephone: Vanderbilt 4445

YARD and SERVICE STATION:
Fordham Street, City Island, N. Y.
Telephones: City Island 1645-1646



Make our centrally located showrooms your motor boat headquarters. At 532 Lexington Avenue, just two blocks north of Grand Central Palace and one block east of Park Avenue, you will find it easy to reach from any point in the uptown shopping and hotel districts.

Advertising Index will be found on 3rd last page



A class of interesting little sailboats popular in Australia and known as eighteen-footers. They are distinguished by the enormous area of sail which they carry, these boats having 2,555 square feet

JULY, 1928

Vol. XLII, No. 1

MOTOR BOATING

FIFTY-SEVENTH STREET AT EIGHTH AVENUE NEW YORK, N. Y.

Edited by

CHARLES F. CHAPMAN

CONTENTS

One of the feature articles in August MoToR BoatinG will be the story of the Capitol cruiser race, a jaunt of nearly twelve hundred miles from Olympia, Washington, to Juneau, Alaska, in which some dozen small craft are participating. Charles F. Chapman, editor of MoToR BoatinG, is a member of the crew of one of the racing boats. His story of the race giving first hand information of these glorious motor boat cruising waters of the northwest will appear in our next number.

COMING EVENTS

July 3-4—Monroe Yacht Club Twenty-fifth Anniversary Regatta, Monroe, Michigan
July 3-4-5—St. Louis, Mo. Annual M.V.P.B.A.
July 4—Albany Yacht Club, Albany, New York
July 4—Bayshore, Great South Bay Yacht Racing Association
July 4—Beverly Yacht Club, Marion, Mass.
July 6-7—Yachtmen's Club 20th Annual Ocean Race to Ocean City Yacht Club, N. J.
July 8—Bear Mountain Handicap for Cruisers, Colonial Yacht Club, New York City
July 7-8—New England Outboard Regatta, Springfield, Mass.
July 10-11—Biloxi, Mass.
July 10-31—La Seine and la Baule, France
July 11, 12—Playland, Rye, N. Y., Regatta and Carnival Westchester County Park
July 14—Block Island Race, Cruisers, New York Athletic Club, N. Y.
July 14—Delaware River Yacht Club Motor Boat Regatta
July 14—New England Outboard Regatta, Providence, R. I.
July 14, 15—Lake Hopatcong, N. J.
July 14—Sayville, Great South Bay Yacht Racing Association
July 14, 23—Lake Michigan Yachting Association, Race and Cruise Week
July 14—Boston Yacht Club, Ocean Race, Hull, Mass.
July 14-15—Hydroplane and Speed Boat Races, Lake Hopatcong Association, Lake Hopatcong, N. J.
July 20, 21—Portland, Maine, Yacht Club
July 20, 21—New England Outboard Regatta, Portland, Maine
July 21—New York Athletic Club, Outboard Race
July 20-22—Bay Head Yacht Club, Jamaica Bay, New York
July 21—Babylon, Great South Bay Yacht Racing Association
July 22—Outboard Races, Pequonnock Yacht Club, Bridgeport, Connecticut
July 23 to 28—Long Island Chamber of Commerce, Water Tour Around Long Island, N. Y.
July 27-29—Buffalo Launch Club, Buffalo, N. Y.
July 28—Riverside Yacht Club, Cruisers, Craig Trophy Race to Vinyard Lightship and return
July 28—Red Bank Yacht Club, Battery to Red Bank, Outboards.
July 28—New England Outboard Regatta, Hull, Massachusetts
July 28—Mackinac Race, Chicago Yacht Club
July 28—Fire Island Yacht Club, G. S. B. Y. R. Ass'n.
July-August—Pacific Southwest Exposition, Long Beach, Cal.
August 2, 4—Miles River Yacht Club, Easton, Md.

(Continued on page 126)

Published monthly by the INTERNATIONAL MAGAZINE COMPANY, INC., at 57th Street, at Eighth Avenue, New York City.

RAY LONG, President — THOMAS J. WHITE, Vice-President — ARTHUR S. MOORE, Treasurer — AUSTIN W. CLARK, Secretary

Single copies, per issue, Thirty-five cents. Yearly subscription in the United States and Canada, $3.00. In foreign countries, $4.00. When you receive notice that your subscription has expired it is best to renew it at once, using the blank enclosed. When changing an address, give the old address as well as the new and allow five weeks for the first copy to reach you.

Nothing to Stop You

A bit of dry, fast travelling over lumpy water

Swagger little Model 16 reeling off some smooth miles

WILL ROGERS recently reported that in his last tour of the country he had found *one* family too poor to own two cars.

You probably have trailed behind some of the others on a Sunday afternoon, so you will know it is the truth.

If you live near a nice bit of water—ocean—bay—lake—or river, you're lucky. With a Sea Sled you can open up the throttle and get all the fresh air and oxygen you hanker for, and there are no traffic regulations to stop you. Yours is an open road where the going is good.

You don't need to be a boat expert, not a bit of it. Bless your heart, the boat experts were the last to put their O.K. on the Sea Sled Marine Runabouts which are adding so much new pleasure to the lives of Americans not too poor to own two cars.

Suppose you are a man of means. The big Sea Sled, Model 28, equips you for the water with the comfort and luxury furnished by your costly imported car ashore. Out on the water you get the freedom of speed which brings so great a sense of gay exhilaration, and the added satisfaction of knowing that there is no craft afloat which combines speed with safety and comfort to an equal degree with the Sea Sled; no craft which comes down so softly on rough water when driven at speed; none which ships green water so seldom, or is so little troubled by rolling and pitching.

Or there is Model 23, which is rapidly becoming a favorite with sportsmen because of her ability to go through almost any weather anywhere, safe and dry. Model 23 is a slightly smaller craft than Model 28, and is priced so moderately that any man who takes his water sports seriously can well afford to own one.

Then come the little outboards, furnishing swift water transportation for all—swagger Model 16 with double cockpits and forward steering control; and little Model 13 which has yet to meet her match in standing up to hard weather at speed.

These craft are all mahogany, with double-planked bottoms, carefully selected material and quality workmanship. Each is as fast as anything you are likely to meet outside the professional racing class, and combined with speed, Sea Sleds carry the highest factor of safety of any craft of their inches afloat.

Dealers' Opportunity

The list of retail dealers is growing in a gratifying way, but the United States is a big place to cover competently and there are still spots with good water facilities to which the Sea Sleds have not reached as yet. If you happen to be doing business in such a location, we'd be glad to have you write for dealers' terms.

Model 16 is a fast outboard runabout, all mahogany, full deck, double cockpits, double-planked bottom, and complete equipment with the exception of motor.

List Price $475

Model 13 trotting off with two

Model 13 was the only hull to finish out of 38 in the Catalina Ocean Sweepstakes. All mahogany hull, double planked bottom, the ablest thing of her size afloat.

List Price $218

Exclusive features

Dependable as a fine car
Will not roll
Will not stick her nose under
Planes on her own spray
Does not drag aft
Navigates shallow water
Safe and dry at speed in rough water

Exclusive uses

Commuting marine motor
Class racer for youngsters
Fast marine runabout for women
Day Cruiser for family
Tender for racing yachts
Harbor tender for sea-going yachts

TRADE-MARK REG. **SEA SLED** U. S. PAT. OFFICE

THE SEA SLED CORPORATION

Sole Licensee under Hickman U. S. Patents

226-228 Fourth Ave. at 19th St., New York

All Prices F. O. B. Yards at W. Mystic and Groton, Conn.

Model 28—200 H.P. Sedan Top - - $8,500

Model 23—75 H.P. Sedan Top - - $2,700

SEA SLED

SPEED - - WITH COMFORT AND - - SAFETY

Advertising Index will be found on 3rd last page

New AMERICAN Outboard Records

Nineteen New Marks Established This Year in Regattas Sanctioned by the American Power Boat Association Under New Outboard Rules

SINCE the new outboard rules began to function a few weeks ago, nineteen new American outboard records have been established, in various parts of the country. The new records have not been limited to any one class or locality. They have been established in New England, Florida and on the Pacific Coast, one or more new records having been set up at practically every major outboard regatta since May first.

The new outboard rules, as one will recall, are those approved by every manufacturer of outboard motors and have been endorsed by the various outboard racing associations including American Outboard Motor Association, American Power Boat Association, Detroit Outboard Association, Florida Outboard Racing Association, New England Outboard Motor Boat Association, New York Outboard Association and the Virginia Outboard Association.

All of the new records which have been established have been made in connection with American Power Boat Association sanctioned events. Thus with the new rules, it was possible to obtain an accurate check on the lengths of the course, the correctness of the times and the fact that the motors were stock and not special in any way. Only authorized officials have acted as timers, surveyors, measurers and race officials. The new outboard racing rules have proven their worth and are found to be exactly the machinery for taking care of the arrangement of American outboard records. Local race officials in the various localities where sanctioned races have been held have co-operated to the utmost and nothing has been accepted by them until they were assured of the accuracy of same.

In Class A, which includes motors up to 14 cubic inches piston displacement, new 2-mile records have been established in both the Amateur and the Free-for-All Divisions. At Worcester, Massachusetts, on May 30th, a new Amateur record of 22.15 miles per hour for 2 miles in Class A was established by the Lockwood powered boat Demon, owned and driven by A. Sutherland. Mr. Sutherland's boat was a Cute Craft.

The 2-mile, Class A, Free-for-All record was also established at Worcester, Massachusetts, on May 30th. Al Buffinton, driving his own Cute Craft, established a record for this distance of 23.841 miles per hour, using a Lockwood Class A motor.

In Class B, the results have been almost unbelievable. J. E. Wilkinson, driving his Cute Craft, which was powered with a Class B Lockwood motor, in the Mile Trials at Worcester on May 29th, averaged 35.66 miles per hour for six one-mile runs, establishing a new Class B Free-for-All record. Not only did Mr. Wilkinson's speed break the then existing Class B one-mile record but it also bettered the then existing Class C record.

At Lake Elsinore, California, on May 16th, the boat Goo Bye, owned and driven by O. Robinson, established a new 2½-mile Amateur Class B record of 23.529 miles per hour. Mr. Robinson's boat is 13 feet 9 inches in length, built by F. J. Pierce and powered with a Class B Johnson motor. The 2-mile Class B Amateur record was broken at Worcester by Mr. Sutherland in his Demon, which he drove in competition at a speed of 28.35 miles per hour. Mr. Sutherland's motor was a Lockwood and his boat a Cute Craft. At the same regatta a 2-mile Free-for-All *(Continued on page 98)*

American Outboard Motor Records

No.	Place	Date	Dist.	Class	Division	Motor	Time	Speed	Name Boat	Owner	Driver	Length	Builder
1	Miami Bch., Fla.	Mar. 19	1*	D	Amateur	Elto	Mean	31.08	Baby Wanderjax	W. Ware	W. Ware		Boyd-Martin
2	San Diego, Cal.	April 22	5	C	Free-for-All	Evinrude	8:42.4	34.46	Firefly	Chas. Holt	Chas. Holt	14'	F. Ashbridge
3	L. Elsinore, Cal.	May 6	2½	B	Amateur	Johnson	6:23	23.529	Goo Bye	O. Robinson	O. Robinson	13'9"	F. J. Pierce
4	L. Elsinore, Cal.	May 6	5	C	Amateur	Evinrude	9:06	33.028	Miss Elsinore	Floyd Pierce	Floyd Pierce	16'	Holt Bros.
5	Long Beach, Cal.	May 20	3	C	Amateur	Evinrude	5:31	32.727	Black Maria II	A. Thompson	A. Thompson	13'6"	F. J. Pierce
6	Long Beach, Cal.	May 29	1	C	Amateur	Evinrude	1:48	33.333	Firefly	Chas. Holt	Chas. Holt	14"	F. Ashbridge
7	Worcester, Mass.	May 29	1*	B	Free-for-All	L'kwood	Mean	35.660	Wilkie's Baby Cute Craft	J. E. Wilkinson	J. E. Wilkinson	8'8½"	Cute Craft Co.
8	Worcester, Mass.	May 29	1*	C	Amateur	Evinrude	Mean	33.806	Fairchild Aero	Haynes Griffin	G. DeAngelis	12'6"	Fairchild Co.
9	Worcester, Mass.	May 29	1*	C	Free-for-All	Evinrude	Mean	34.287	Fairchild Aero	Haynes Griffin	J. C. Smith	12'6"	Fairchild Co.
10	Worcester, Mass.	May 30	1*	E	Amateur	Johnson	Mean	35.022	Baby Whale XIII	H. R. Maddocks	H. R. Maddocks	14'	D. N. Kelley
11	Worcester, Mass.	May 30	2	A	Amateur	L'kwood	5:25	22.15	Demon	A. Sutherland	A. Sutherland	8'8½"	Cute Craft Co.
12	Worcester, Mass.	May 30	2	A	Free-for-All	L'kwood	5:02	23.841	Cute Craft	A. T. Buffinton	A. T. Buffinton	8'8½"	Cute Craft Co.
13	Worcester, Mass.	May 30	2	B	Amateur	L'kwood	4:14	28.35	Demon	A. Sutherland	A. Sutherland	8'8½"	Cute Craft Co.
14	Worcester, Mass.	May 30	2	B	Free-for-All	L'kwood	3:58	30.25	Wilkie's Baby Cute Craft	J. E. Wilkinson	J. E. Wilkinson	8'8½"	Cute Craft Co.
15	Worcester, Mass.	May 30	2	C	Amateur	Evinrude	3:39	32.876	Baby Whale XIII	H. R. Maddocks	H. R. Maddocks	14'	D. N. Kelley
16	Worcester, Mass.	May 30	2	C	Free-for-All	Evinrude	3:39	32.876	Baby Whale XIII	H. R. Maddocks	H. R. Maddocks	14'	D. N. Kelley
17	Worcester, Mass.	May 30	10	C	Free-for-All	Evinrude	18:23	32.668	Baby Whale XIII	H. R. Maddocks	H. R. Maddocks	14'	D. N. Kelley
18	N. Beach, Cal.	June 3	1*	C	Amateur	Evinrude	Mean	38.436	Firefly	Chas. Holt	Chas. Holt	14'	F. Ashbridge
19	L. Elsinore, Cal.	June 10	2½	C	Amateur	Evinrude	4:19	34.749	Bonnie Lass	J. F. Graham	J. F. Graham	16'	Holt Bros.

*Average of six one-mile runs.

Boating on Arctic Waterways

The Author Continues a Venturesome Journey Up the Peace River by Steamer and Finally by Indian Canoe with an Aged Outboard Still in Running Condition

By LEWIS R. FREEMAN

Author of "In the Tracks of the Trades," "By Waterways to Gotham," "Down the Grand Canyon," "Waterways of Westward Wandering," etc., etc.

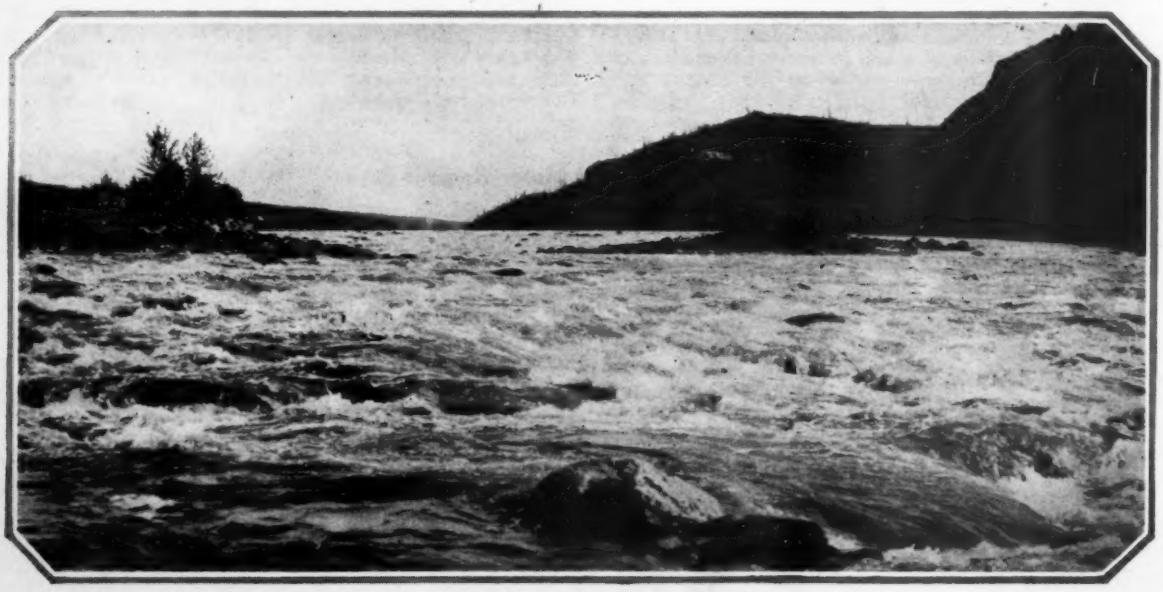
CHAPTER IV

Into the Jaws of the Rockies

AT two or three points along the Peace I attempted short side trips with canoe and outboard in order to reach points not on the regular itinerary of the steamer. These jaunts were highly interesting and satisfactory as long as I was on the breeze-swept waters of the river, but all but annihilative from mosquitoes wherever a landing was necessary. As the great Rocky Mountain Canyon of the Peace was the only place where it was imperative that I push investigations with my own outfit, I was glad to avail myself of the protection of the screened cabins of the steamer most of the way to the foot of that mighty gorge.

The fifty miles from St. John to Hudson's Hope is the swiftest water on the navigated Peace, as the ever narrowing and deepening gorge of that section is the finest scenically. There was a hard fight for the steamer all the time, but especially where it breasted the current in the restricted channel called the Narrows, a few miles below the Hope. In the sheer black cliffs that wall the river here there is just a suggestion of the imposing ramparts of the lower Mackenzie, though on a somewhat reduced scale. We touched bottom once or twice in the straggling shallows below the defile, where there are considerable stretches that must be very difficult to navigate in the low water of the spring and the late summer. As the swift current has carried away all the sand and mud, leaving only boulders and bedrock at many points, striking bottom with a wooden hull is not a thing lightly to be courted.

There was one place on this upper stretch of navigation that I was very anxious to see. This was a bend at which I had been assured so heavy a slide had occurred, a decade or so previously, that the river had been blocked from bank to bank for many days. I had seen sites of similar dams on the Colorado and Columbia, where the stories of the play of the titanic forces involved were writ-



Where the Peace River rolls out of Rocky Mountain Canyon

Half-breed trappers fording the Peace River with a crude boat

ten plain in gouged and riven banks and boulder-choked river beds.

Captain McLeod called me to the pilot-house when the steamer began to work up past the straggling rock and mud island in midriver that marked the path of the great slide. The setting was a bit disappointing. The scar on the north bank disclosed the displacement of an enormous mass of earth and rocks, but certainly not enough to have extended all the way across the comparatively wide channel. Nor was the angle of the slope sufficient to have precipitated so plastic a body so great a distance. A spring-time avalanche of mud and snow might conceivably have flowed across the ice and frozen bars to the southern side, but such a movement could hardly have occurred with the river open. The surviving island of the present day probably extends to within a hundred feet or so of the extreme southerly advance of the slide which made it.

The classic instance of the formation of a natural dam of this kind occurred in the 1840s on the upper Indus in Kasmir. The lower river suddenly dried up from the Punjab to the sea, remaining hardly more than a trickle for several years. Renewal of flow came in the form of the most destructive flood in the history of India, towns and cities for many miles on both sides of the regular channel being swept away by a devastating wall of water released when the great slide, which had impounded a mountain lake in the high Himalayas, was finally overtopped and washed down.

Mountain peaks and mountain pines, a loftier-lifted plateau and broken white water ahead signalized our approach to the head of navigation of the Peace. The red flag of the Hudson's Bay Company whipped above the yellow-clay-washed buildings of the old post which crowned the rim of the plateau above a steep bank streaked with the tumbling waters of many springs. The smoke-wreathed tepees of an Indian encampment sprinkled the flat on the opposite side of the river where the original fort had stood. Canoes were drawn up from the waterside on either bank, with one overloaded craft breasting the current under the power of a popping outboard.

Mike and his Elto

The steamer moored against the bank at the foot of a road which probably follows the identical course of the original Indian portage trail around Rocky Mountain Canyon. For the foot of the famous gorge was just around the bend now. With a two day halt in prospect there ought to be opportunity to see something of it at both ends, perhaps even to gain some idea of the odds the indomitable Mackenzie had faced in trying to fight its rock-torn torrents with his pitfully inadequate birchbark canoe.

After wintering at the fort above the mouth of the Smoky, my visit to the newly discovered site of which I have described in a previous chapter, Mackenzie was ready to resume his transcontinental journey up the Peace in May, 1793. The more

The rolling waters of the Peace above St. John

One of the boats with outboard motor used on the Peace

effectively to concentrate effort and leadership the explorer had decided to make the attempt to transport his whole party and outfit in a single birchbark canoe. Never in all the annals of exploration has there been presented such a contrast between the task in hand and the means by which it was to be accomplished. By comparison Lewis and Clark, a decade later, advanced up the Missouri with a veritable flotilla.

Of craft and outfit Mackenzie writes:

". . . The canoe was put into the water; her dimensions were twenty-five feet long within, exclusive of the curves of steam and stern, twenty-six inches hold, and four feet nine inches beam. At the same time she was so light that two men could carry her on a good road three or four miles without resting. Into this slender vessel, we shipped provisions, goods for presents, arms, ammunition and baggage, to the weight of three thousand pounds, and an equipage of ten people."

That a total weight which could not have fallen far short of five thousand pounds could have been carried in so small and so light a canoe even across the smooth waters of a lake is astonishing; but the near-miracle of the achievement only comes home when one learns how this frail overloaded shallop of bark was paddled, poled, dragged and carried up one side of the hitherto uncrossed Rockies and down the other, finally to be brought back over the same journey in reverse. How many times it had been renewed by patchings and repatchings is not recorded, but it is not likely that anything but the original frame—and probably not all of that—completed the whole route.

The crew was partly made up of tried veterans from the previous voyage to the Arctic. Besides the leader the only other man of unmixed white blood was Alexander Mackay, who later played a notable part in founding the John Jacob Astor post at the mouth of the Columbia. His tragic death by being blown up in the Tonquin during an Indian attack is graphically described in Irving's "Astoria." Six French Canadians and two Indians completed the personnel.

Among the Canadians was Francois Beaulieu, who later became notorious in the Great Slave Lake region under the name of King Beaulieu. He died in 1872 at the age of nearly a hundred and, according to tradition, with a good many more than a round century of offspring. The title, it seems, was acquired through a really regal habit the fellow had of bundling off any and every Indian maid that caught his fancy to his stronghold on the Slave. As many of these as possible were returned when, at the age of seventy, the old gallant got religion and was baptized by Bishop Tache. All of the children, so far as there is any record, turned out bad, as have also their children and their children's children. I was assured later on the Mackenzie that no trader, hunter or explorer has ever hired a Beaulieu but to his sorrow.

Mackenzie records how those left behind at the fort shed tears "on the reflection of those dangers which we might encounter in our expedition." By an amusing coincidence he has just made mention of the fact that some of the Indians had sent an embassy to him to demand rum "that they might have an opportunity of crying for their deceased brother." "It would be considered an extreme degradation," he writes, "in an Indian to weep when sober, but a state of intoxication sanctions all irregularities." Whether or not the farewell weepfest was thus rum-sanctioned it is not stated.

The staving of a hole in the overloaded canoe and the loss overboard of his pocket compass could not blind Mackenzie to what he describes as the most beautiful scenery he had ever beheld. There is something of the gladness of the springtime in this early entry, a

A thirty-foot birch bark canoe of the type used by Mackenzie on the Peace River

Rocky walls of the Peace near Hudson's Hope

touchstone, as it were, of the highness of his hope:

"This magnificent theatre of nature has all the decorations which the trees and animals of the country can afford it, groves of poplar in every shape vary the scene. The whole country displayed an exuberant verdure; the trees that bear a blossom were advancing fast to that delightful appearance, and the velvet rind of their branches reflecting the oblique rays of the rising or seting sun, added a splendid gaiety to the scene, which no expressions of mine are qualified to describe."

Indians were met with frequently as the up-stream voyage progressed, but they were either unable or unwilling to give any definite information respecting the course or character of the river through the great mountain barrier ahead. Their descriptions were still calculated to convey the impression that the way was blocked by a sheer fall as high and formidable as Niagara, and that the only way to get above this was by leaving the river and making a long detour over the mountains. As a matter of fact, this was a fairly correct approximation of the actual conditions, excepting of course, that there was no abrupt cataract in the canyon. This gorge was, however, quite as impassable for boats as it would have been if there had been a veritable Niagara and the only way around it was by such a portage as the Indians described.

In discounting the Niagara story the explorer made the serious mistake of also failing to reckon with the necessity of the portage, thereby all but bringing his expedition to grief at the outset. In spite of finally being able to extricate himself from the difficulties incident to trying to pass up-stream through a gorge which has never to this day been negotiated even with the current, Mackenzie made frank record in more than one page of his journal that he should have portaged by the old Indian trail.

Many of the most gallant fights of history have been forlorn hope actions which would never have had to be waged save for the fact that "someone had blundered." Because Mackenzie was lacking in foresight and prudence in fully investigating the possibilities of portaging all the way round the Rocky Mountain Canyon of the Peace, he was forced to make a fight which deserves place as one of the gamest and most courageous struggles that has ever been waged against a river.

Man has tried to battle his way up or down rock-walled canyons ever since he developed mentally to a point where he began to wonder what was going on with his neighbors in the valley above or below him. Yet in casting back over the authentic records of men who have tried to do the same sort of thing Mackenzie attempted at Rocky Mountain Canyon I can think of only one achievement worthy to compare with the fight of the intrepid young Nor'-Wester. This was that of Lieutenant Wheeler, of the Engineering Corps of the U. S. Army, in working up through the lower sixty miles of the gorge of the Grand Canyon of the Colorado. This part of the Grand Canyon has rougher water and higher walls than has any part of the gorge of the Peace, and Wheeler performed a feat that would be quite impossible in ordinary seasons only as a consequence of being favored by a lower stage of water than has ever been recorded in the more than half a century that has elapsed since he fought his way through to Diamond Creek.

It is only when one considers the wide difference in the conditions under which the two expeditions were undertaken that he realizes that Mackenzie really did a more remarkable thing in taking a birchbark canoe up six or eight miles of the Rocky Mountain Canyon than Wheeler did in dragging his staunch boats up sixty miles of the Grand Canyon. The one was work-

(*Continued on page* 54)

Photographs by M. Rosenfeld

Baby Whale XIII, the fast boat of H. R. Maddocks which was responsible for its share of the new records

Eleven Records Set at Worcester

New England Outboard Motor Boat Association Gets Off to a Flying Start at Lake Quinsigamond Regatta and Establishes Many Marks for Outboards to Shoot At

For Summary of Results See Page 126

THE outboard racing season started in New England on Decoration Day with a mighty roar and a crashing of records. Lake Quinsigamond near Worcester, Massachusetts, was the scene of the first of a series of outboard regattas which the New England Outboard Motor Boat Association has planned for the summer. The quiet waters of this pretty little lake were ripped and slashed as never before when the many visiting outboard boats tore up and down during the events of the day. The plan for the meet called for a series of one mile record trials on the first day, May 29th, while the second day was reserved for races for all classes of engines winding up at the close with a Grand Free for All Race of ten miles length.

The New England Outboard Motor Boat Association through its regatta committee chairman, Frank Wigglesworth, took charge of the entire regatta assisted by Commodore Eldridge and Secretary Willis of the New York Outboard Motor Boat Association. In order to enter a boat, it was required that contestants be members of one or the other of these associations. Many other members of the two associations were also present and assisted greatly in the efficient management of the contests.

For the purposes of outboard motor boat racing Lake Quinsigamond furnished an ideal setting. The length of water available is more than sufficient for all requirements while the width and depth of water also left nothing to wish for. A course had been carefully surveyed which consisted of a rectangle which was two miles in length with two ninety degree turns at each end. The contestants had no difficulty in negotiating the turns as the distance between the two runs in opposite direction was sufficient to allow them to make a wide continuous sweep at the ends without great loss of time.

Of a large number of contestants assembled at the lake, thirty four tried for the one mile record by making six runs up and down the course. This meant a total of over two hundred separate timing operations on the part of the committee. When it is considered that the committee was at this task from early morning until dark, it will be grasped what a problem they were facing. As the day wore on, it was apparent that it would not be possible to permit each boat to consume as much time as was desired for the sake of completing the six runs. As soon as it developed that a boat lacked sufficient speed, it was withdrawn from the course and another one sent out for its trials. The boats

Jim Smith and his Fairchild Aero which also established records on the two-mile course

which failed to hold a speed of 30 m. p. h. or better were called off after the first run or two. In this way it was possible to carry through the large number of trials which were held. The first run of the day was likewise the fastest of the entire series. J. E. Wilkinson, driving Wilkie's Baby Cute Craft and powered with a Lockwood Class B engine made six continuous runs of which the best were 36 m. p. h. and the poorest 35.021 m. p. h. The mean of these proved to be 35.660 m. p. h. and established a record for this class and form of contest.

Wilkie's Baby Cute Craft driven by J. E. Wilkinson succeeded in setting up records in both classes A and B

A smaller Hooton Bob Sled driven by D. Haskins with a Lockwood A engine also set up a record at the rate of 26.849 m. p. h. In this case the fastest single mile was made at the rate of 27.191 m. p. h. and the poorest 24.471 m. p. h.

A class C record was established by J. C. Smith, driving a Fairchild Aero with an Evinrude engine which resulted in a mean speed of 34.287 m.p.h. His highest speed was 34.615 m.p.h. for a single mile and the lowest 33.962 m.p.h A class E record was also set up when H. Ross Maddocks drove a Baby Whale six times over the mile with a large class E Johnson engine at a mean speed of 35.022 m.p.h. It must be recorded that all of these trials and races throughout the two days were made with standard engines equipped with mufflers. By way of contrast with the usual noisy condition that regattas of this kind, the lack of noise was very pronounced.

From the results obtained it serves to show that the bulk and size of the engine alone are not all that are necessary in order to produce a record breaking combination. It will be observed that the class B record is better than any other made in the larger classes on that day. There is such a thing as overpowering a boat without necessarily producing a greater amount of speed. A properly built and designed hull has more to do with the production of high speeds than almost any other factor. Elsewhere in this issue there will be found a complete summary of all the outboard motor records made to date, although at the rate at which these records are falling and being re-established, it would seem that by the time this appears in print, an entirely new series of records will have been made.

Records Made at Worcester, Massachusetts, May 29-30, 1928

Class	Distance	Division	Record	Engine
A	2	Amateur	22.15	Lockwood
A	2	Free for All	23.841	Lockwood
B	1*	Free for All	35.660	Lockwood
B	2	Amateur	28.35	Lockwood
B	2	Free for All	30.25	Lockwood
C	1*	Amateur	33.806	Evinrude
C	1*	Free for All	34.287	Evinrude
C	2	Amateur	32.876	Evinrude
C	2	Free for All	32.876	Evinrude
C	10	Free for All	32.668	Evinrude
E	2	Amateur	35.022	Johnson

*One mile time trials, mean of six runs.

The second day of the races saw the program get under way promptly at 12 o'clock noon. In fact the committee was ready before the contestants were aware of the passing of time and the first heat of the class A amateur event was won by the only starter who appeared at the starting line. About this (*Continued on page* 124)

A busy scene at the floats where the contestants serviced their boats and engines

Yachtsmen Here and Abroad

At left: At the Newport yacht races, H. S. Matzinger of Roslyn, L. I., and Mrs. Briggs of Detroit, Mich., enthusiastic yacht race followers

Irene Rich and daughter Francis, driving their outboard at Santa Barbara, California

Below: Miss Helen Hentschel, American outboard ace who is driving her American outboard boats in European races this summer and was successful in winning first places

Claude Graham-White of London at the wheel of one of his Baby Gars which he uses exclusively on the Thames and at Cowes

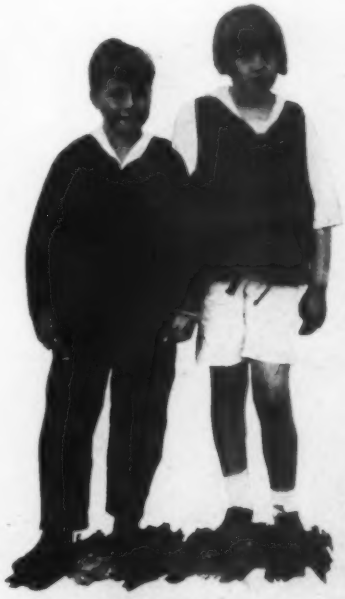
Motor Boating as an International Sport Attracts Famous People from All Countries

Photographs by—International, and Rosenfeld

Above: H. S. Platt of New York, just before he stepped into the yacht tender, Harmony, at Newport, R. I., to view the yacht races

President Coolidge disembarking from his motor boat at Havana being greeted by President Machado of Cuba

Miss Eleanor Sears of Boston, Mrs. Jay Gould, Prince Christopher of Greece and Mrs. Cornelius Vanderbilt, aboard their motor boat at Newport, R. I.



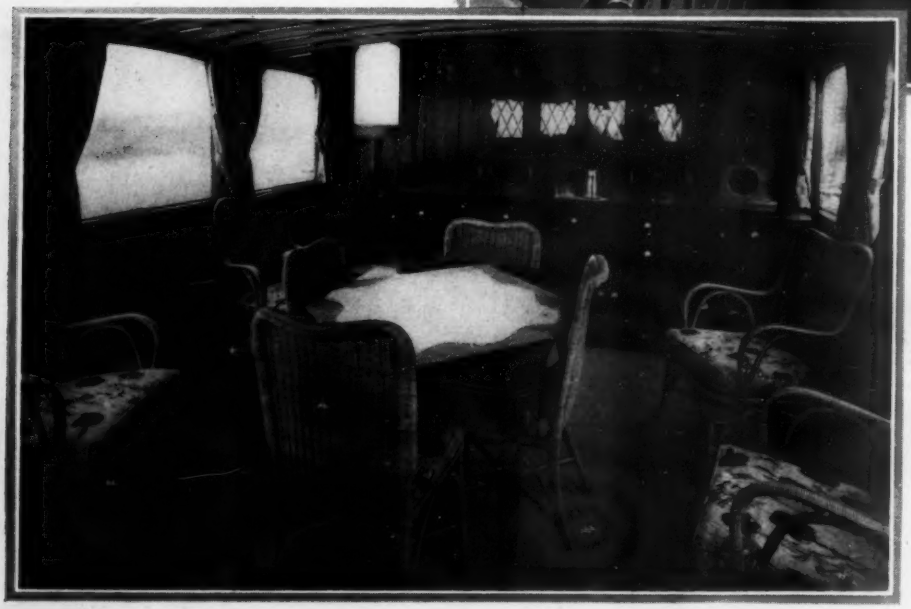
Two youthful outboard enthusiasts ready for their races. Gar Wood, Jr., son of the speed boat king, and Mary C. Chapman, daughter of the Editor of MoToR BoatinG

CIGARETTE, *A New Commuter for* L. Gordon Hamersley

Photographs by M. Rosenfeld

Cigarette is a new high-speed cruiser just completed for L. Gordon Hamersley from designs by John H. Wells. She was built by H. B. Nevins, Inc., of City Island and is a fine example of the modern high-speed motor boat, since she is able to do better than 30 m.p.h.

The engine room is amidships and houses a pair of eight-cylinder Winton gasoline engines with a bore and stroke of 7½ x 8½ inches. These machines are of the high compression type and will develop over 500 h.p. each when turning at 1,300 revolutions. Propeller shafts are of Monel metal and run in cutless rubber outboard bearings



The deck house serves as dining room and lounge and is depressed below the deck line. Quarters for the owner are forward, accommodations for four being provided, while additional quarters for the crew are in the stern

An attractive corner of the deck saloon which is finished in Spanish style with hand-carved trim on the walnut panelling

A special feature is a marvelous Frigidaire refrigerator located in the pantry adjoining the owner's dining room. It was built especially for this boat

to slip through the water with the least possible resistance.

In the engine room will be found a marvelous power plant which consists of two Winton air starting gasoline engines of eight cylinders each. The bore and stroke of these is eight by ten inches and for engines of this size they can be considered high speed since they turn at 1100 revolutions. At this speed they develop 500 h.p. each and drive large Hyde propellers through reduction gears at 650 revolutions. This arrangement secured the greatest efficiency from both the engines and the propellers. To take care of any distortion or misalignment which may occur at times when the boat is running in a heavy sea a Francke flexible coupling is installed next to the reduction gear to compensate for this. On trial trips these large boats secured a speed greater than 21 m.p.h. An abundance of auxiliary machinery is also carried and pumps, blowers, heaters, and deck machinery are electrically operated and receive their power supply from two Winton gasoline generating sets, one of which has a capacity of 10 k. w. and the other 7½ k. w. The electrical installation for all of the lighting and machinery was handled by Cory & Son. Special Frigidaire refrigerating equipment is also provided in the galley and pantries, relieving the boat of the necessity of loading ice with its consequent mess and delay.

The machinery space is located amidships and contains fuel tanks of 1850 gallons capacity, generators, swtchbard, refrigerating set, fresh-water pressure set, pumps and air compressors. Storage batteries of the Exide Ironclad lead plate type are carried under the deck seats above the engine room.

The dining saloon is immediately forward of the bridge deck in the depressed deck house and has very large windows with Ternstedt lifts

West Coast Clubs

Join A. P. B. A.

Commodore A. L. Bobrick Organizes Outboard Racing Under the New National Rules—Several New American Records Already Established in California

THERE has been a good deal said and not a little written within the last two or three months about the races which our West Coast friends have been staging on their coast and lake courses. And it has been warranted. The West has been particularly active recently—especially in the outboard field—and more than one record has been hung up. In fact, the present amateur outboard record at 38.436 m. p. h. for Class C Amateur is a western one, having been made but a short time ago at Newport Beach.

All this activity, although it is something new for the Pacific, has been taken pretty much for granted by the average fan without investigating the causes back of it. The reason is rather clear, however, and it is pretty safe to say that Commodore A. L. Bobrick has had a good deal to do with it. Commodore Bobrick is about as well known as any man in the Association in the East, but it is not every one who knows just what he has been doing on the Pacific Coast to promote well organized racing, advance the American Power Boat Association and encourage the adoption of standard outboard rules.

When Commodore Bobrick, whose principal business connections are at Los Angeles, returned West at the first of the year, the motor boat racing situation there was a bit complicated. There was a good deal of uncertainty about just how races should be run and things were hardly according to Hoyle. The organizations that were supposed to be handling the situation were more or less in a fog. Racing rules were just about everybody's brand. Free for all in the outboard classes meant—use anything you want in any way you like on your outboard. Twin carbureters, aeroplane parts—anything at all. The natural result was what you might expect: Chaos.

Photograph by M. Rosenfeld

Commodore A. L. Bobrick, Past Commodore of the Colonial Yacht Club of New York, who has enrolled many Pacific clubs in the A. P. B. A.

Little was being done to clean up the situation and it was almost impossible to get a sanction for a race that meant anything. Courses, also, were pretty much a matter of local preference.

Art Bobrick, being a Western man himself and well aware of the magnificent facilities for racing that the Pacific Coast waters offer saw no good reason why this muddled state of affairs should exist and set about in a quiet way to do all he could to help things along. As he saw it, the standards of the A. P. B. A. were the best safeguard against racing confusion and disorganization and he worked enthusiastically to have the local clubs adopt them.

It was not an easy job and opposition was stiff in some regions—particularly from the free-for-all-ites. But the racing men themselves were the most vitally concerned and they were not slow to see that it was time to put the screws on somewhere. A start was all that was needed and the Commodore's suggestions, tactfully advanced in the necessary quarters did much to start them pulling together.

Many clubs fell in line. Many joined the A. P. B. A. and renounced the irresponsibles. They invaded the lairs of the free-for-everything enthusiasts and came away victorious. The Southern California racing men got right down to rock bottom and cleaned up. They decided not to race in the future under anything but the standard rules and conditions. In fact,

(*Continued on page* 100)

A *Summer* of Week-End Cruises

An Office Bound Skipper Arranges a Three Months' Vacation Within Commuting Distance of New York Covering Many Miles and Visiting Many Friendly Harbors

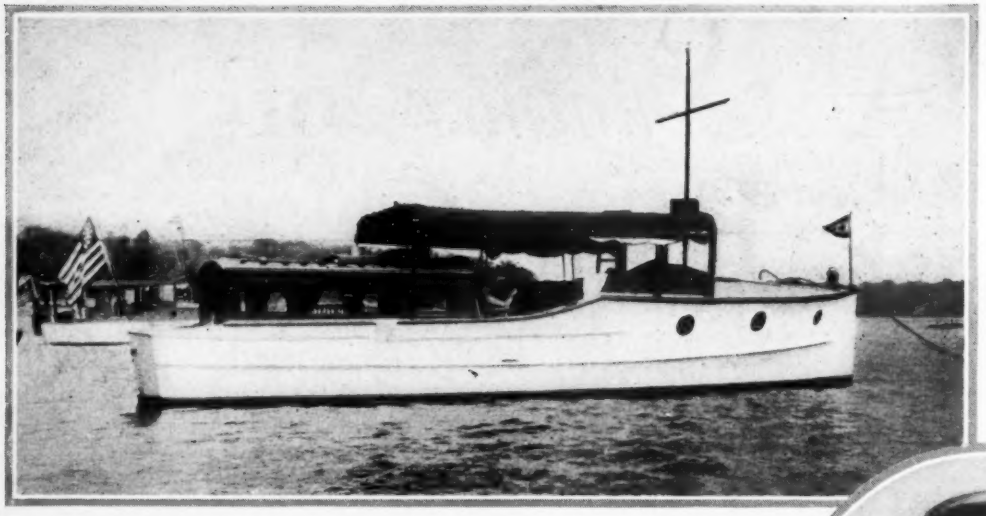
By W. K. SMITH

WHAT do you think, you office bound city skippers who find it impossible to get away from your desks longer than a week end period, what do you think of a three months' summer cruise that will not take you more than two hours' train ride from your office—a cruise that can give you all the pleasure that comes from poking your bow continuously into new waters and ports, with never the bother of having to scoot back to the home club Sunday evening—a week-end cruise, finally, that lasts two or three months yet enables you to sit at your office desk every Monday morning in time to see the mail or get the market openings?

Sounds something like those dreams you had before you got that new cruiser but were never able to work out, because you were tied down to that bothersome essential—the desk. Making the home port after each week-end trip was a fetish that I used to observe religiously until last summer, when early in the season, I suddenly asked myself, "Why go back to the Club?" And I didn't go back and subsequently became the Club's Marco Polo, cruising some five hundred miles before I returned. Yet I was on the job each Monday morning with the office boy—oh well, maybe a little later, especially if it was nice enough Monday morning for an early swim. The same thing is possible for any skipper living close to Long Island. Perhaps it can be done elsewhere, although I know of no other geographical location that lends itself so admirably to the idea.

The plan is simple. Some Saturday morning early in the season, one puts aboard two days' provisions, a clean collar, a bottle or two, a cake of ice and whatever guests are desired, bids his club steward goodbye, and then hauls up the anchor and calmly starts away on a six-hundred mile trip. No worries about stocking up provisions or equipment; no worries about the Monday mail or who'll feed the cat and no need of extra gas tins. No worries I say, because on Sunday night after loafing along for two days, the old battleship is put into some nearby club, tied up to an empty mooring, skipper and guests go ashore and take the train back to New York, leaving the boat on her chain until the next Saturday when with new guests, another collar, a fresh cake of nice cold ice and what have you, the skipper thanks the club, drops his mooring and cruises a bit further around Long Island, repeating the same thing each successive week end. Twenty to fifty miles each week, never returning to the same port, always headed for new waters and always back to the desk on Monday.

One of the pleasures of week-end cruising. Many guests at every new port



The skipper's cruiser Arrow at Greenwich.

The skipper reflects aboard a captured rum runner.

For the benefit of those who may not know the conformation of Long Island, it should be stated that this strip of land extends eastward over 120 miles from New York City. Its coast line, with indentations, measures 600 miles or more—I don't know exactly. There is one yacht club every twenty miles, at least, and sometimes a dozen can be found in that distance. Only along the south shore from Montauk to Fire Island Inlet is there any considerable stretch that offers no shelter, but this stretch can be and should be, obviated by taking the inside course through Peconic and Great South Bays. And there is adventure to be found along this shore—or was at any rate, plenty enough for the office skipper. There are considerable lengths of unfrequented beach where almost anything might happen. I know of at least two places, not so far from Broadway, where the casual skipper throwing his mud hook over in the evening and prepared for a nice quiet night's rest, may be startled after dark by the appearance of a dory load of husky individuals who will tell him to move along and not take his time doing it neither. Or if this does not happen and he seeks adventure by going ashore to find out what's going on with those lanterns moving about, he may suddenly feel a gun stuck in his ribs and be told to beat it quick. One skipper in my acquaintance was kept a prisoner 14 hours with his guests. His injured feelings were nicely salved, however, by twelve nice bottles of real genuine old Scottish snake bite cure, and he decided that it was hardly worth while taking the police into the matter. Again he may find a kick almost anywhere along this coast in getting a solid shot over his bows from a revenue boat. Man, oh man, you have to go down into the revolutionary Caribbean for thrills like that, and here it is right out in the front yard.

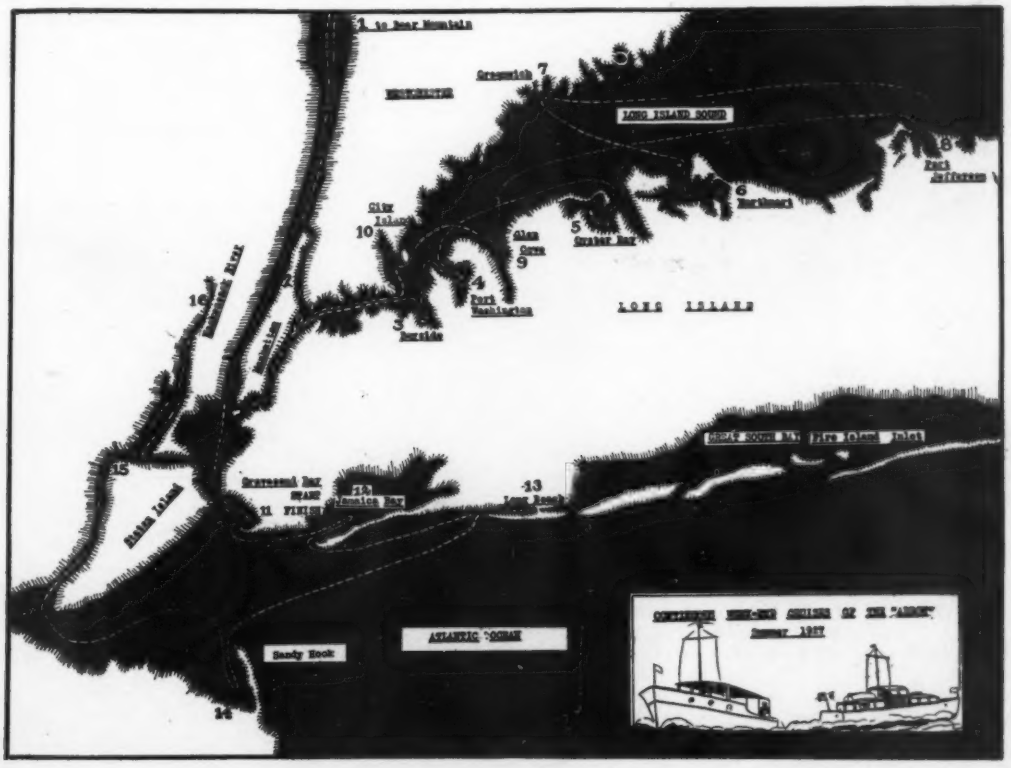
The idea of week end cruising from club to club may not be new to a few skippers who have done the same thing but an elaboration of my idea may be something new in yachting circles. I would like to see a dozen or twenty boats do it this coming season as a fleet. It is not a hard proposition to organize or put into execution. The fleet could be a floating yacht club with no home port or club house. It would have its own admiral, commodores and captains, and if its personnel were free from any rowdy element, it would be most welcome wherever it elected to put in. The reader may recall the original Glidden tours which popularized automobile touring. The week end fleet idea is free from all the objectional elements that eventually made the Glidden tour unsatisfactory. The principal thing in such a cruise is to do away completely with the thought that distance must be covered and the boats must be under way all day. The basic idea is enjoyment and as much fun can be had at anchor in new surroundings ten miles away from the last anchorage as can be had fifty miles away. No racing and all loafing. Good company and new friends each week. If the idea strikes home why let's do it.

The individual skipper may prefer to go it alone as I did last season in my good ship Arrow, a 37 foot, two cabin cruiser, which fed and slept as many as eight of us at a time over the week end, at a total cost of not more than ten dollars a day. Try and do anything like that for five times the cost in an automobile trip week end. The following schedule and notes may be of interest as well as the accompanying chart of last season's cruise which varies slightly from the proposed week end cruise. Let us start, say from the Atlantic Yacht Club at Sea Gate, just west of Coney Island. June 23rd would be a good time to get away—everything's in trim by then. The first stop could be the Colonial Yacht Club landing at 152nd Street and the North River, with an over-night anchorage somewhere up the Hudson, under the shelter of the Palisades. Sunday then could be spent in a run up to Bear Mountain with a return to the Colonial Club Sunday night, where guests and skipper would go ashore leaving the boat moored there until the next Saturday. Of course, the courtesies and amenities of yachting should be observed. On coming in to a strange club, the ship's anchor should be put over somewhere near the float and the dock captain asked concerning a mooring. There will always be an empty one or two which he will direct the skipper to. Then the skipper should present himself to the Club. This will often be found to be an empty gesture as often no officers are about but it should be done—at least see the Steward. The Dock Captains at most clubs are affable and cordial and quite willing to render service to a strange owner but courtesy on the part of the visitor to paid employees never goes amiss. When coming to pick up the boat again after a week's mooring or when going ashore, the skipper should tip the dock man for his services. Five dollars is a fair amount for looking after a boat during the week, putting ice and supplies on board and tendering guests. Most clubs are quite willing to have their men make these fees. Yachting is still more or less a gentleman's game and the skipper who is not willing to play it as such had better stick to his home club. By this, I mean that a boat on a visiting cruise of this nature should be kept

clean and tidy and particularly ship shape. Guests should wear suitable clothes and the skipper wear blue or white flannels and his club cap. No overside swimming should be indulged in close to club houses where such sport is not desired. Care should be taken of garbage and bottles. They should not be dumped indiscriminately to float in on private beaches. Boisterous parties should not be given aboard that will disturb club members on porches or on adjoining boats. The failure to observe proprieties of this kind will make a visitor unwelcome. Perhaps these things should not be said, they should be naturally understood.

To continue the schedule, however. From the Colonial landing, the next jump can be taken through the Harlem and Hell Gate to a club on Little Neck Bay, say Bayside, where I found the utmost attention to visitors. The Harlem River, even at full tide, will not cause any difficulty to a boat whose engine will keep going at eight miles an hour. It should be remembered that the tide sweeps into the Harlem from the Hudson up the East River and out through Hell Gate into Long Island Sound and vice versa. I have traversed this stretch against full strength of tide without any difficulty, noting only a perceptible slowing down in the races. The Harlem is much more difficult than Hell Gate because of the traffic. At High Bridge there will be found a strong whirlpool and care should be taken in passing under the arches. In fact it is well not to try to pass any boat under any Harlem bridge. The wash from a tug combined with the current is apt to throw a small boat up against the piers. Through Hell Gate no trouble is apt to be encountered and Little Hell Gate can be navigated easily enough. The wider southern course is preferable, however. Bronx Kills should not be attempted (although I understand it is possible to get through at high water with a small boat). The best time for this passage (for an inexperienced skipper) is at slack water which will occur approximately two hours after high and low at the Narrows. The tides are weakest then. In the stretch under Hell Gate bridge one should look out for Sound steamers, especially the big side-wheelers, and for express commuting boats. The stream is narrow here and the wash may roll a small boat pretty badly. The express cruisers, taking commuters to North Shore points, slip up very quickly from behind, and they do have a tremendous stern wave. The time will come when there will be marine traffic cops along there to hold the speed demons down.

An all night stay can be at Bayside and on Sunday, July 1, a run can be made out into the Sound, returning to Manhasset Bay where there are several clubs at which moorings can be had. The 4th of July, being only a one-day holiday this year, might be used for a short run to Larchmont for the sailing races. The next Saturday, Oyster Bay should be the destination, and I would advise laying here all day Sunday, the 8th. This bay is so delightful, together with Cold Spring Harbor, that a week-end can easily be spent enjoyably. On the 14th of July, guests can be picked up a hundred feet from the Oyster Bay station, at the gasoline station of the Seawanakha Club—the Club itself is located some seven miles around the neck that makes Center Island. That night I would suggest anchoring in the delightful sand cove on the west extremity of Lloyds Neck. On Sunday after a trip out in the Sound put into Huntington Bay and anchor well inside Northport Bay. The Independent Club is here and the anchorage splendid. Huntington Club offers the visitor facilities but I prefer narrower coves. At Northport is a good ship repair yard where any engine or hull difficulties can be attended to. The entrance to the Harbor is a bit winding but very easy to follow. The railroad is some distance from Northport Harbor but there is a bus that meets all trains both ways. On July 21, guests can be picked up at Northport—(it is but an hour and a half from New York) and I would suggest that the night and next day be spent in the sand cove on the east side of the entrance to Huntington Bay. It is a little hard to discover the entrance to this cove and considerable care must be taken at high water to run in almost parallel to the shore at not more than bare headway. Once inside there is twenty feet of water. *(Continued on page 88)*



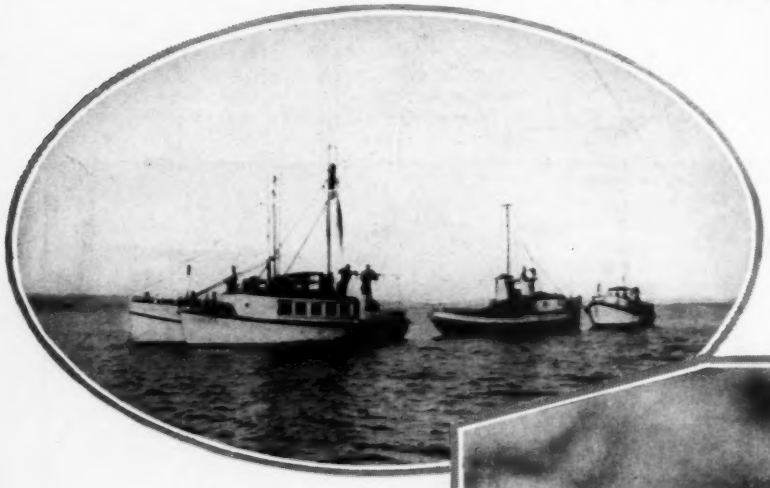
A chart which shows the various ports at which the motorboat Arrow stopped during its three months' week-end vacation cruise.

Wee Yot *Makes*

A Small Boat With An Ambitious Outboard Engine Accomplishes A Long Voyage With Ease and Much Benefit to the Crew

EARLY dawn found the intrepid mariners rarin' to go. They went! With a foggy day on tap they set their course for Port Angeles in the Straits of Juan de Fuca, less than one hundred miles from the Pacific Ocean and Cape Flattery. With the wailing of the fog horn at Port Wilson for company they trekked down the Straits, the Big Twin functioning perfectly. As the ship's time piece struck eight bells the sun shone through the fog, casting brilliant rays on the snow of the Olympic Mountain range.

Boyd guided her by various fishing smacks, canners' traps, an occasional town nestled along the shore also greeted their weather eye. Port Angeles proved to be a nice little city with perhaps twenty thousand on the register at the town hall. There, at the port, Boyd saw how far into his foot he could run a big 10d spike. It went right into the mall of his limb. First aid was rendered by the shipmaster and second aid by a town physician. No ill effects were suffered although the feeling was perhaps far from pleasant.



Trollers hard at it

Two men who love the highway of the vast, open spots, honored P. A. by laying to for the night.

Morning again! Ah, one of those lovely summer days that makes living in the Puget Sound country an exquisite joy. Short and snappy was the run across the Straits of Juan de Fuca. Smashing into long, deep swells, they set their course for Victoria, metropolis of Vancouver island, and incidentally just a little bit of old England removed to the North American continent.

At times Wee Yot was so far down between the swells that visibility was completely blocked, but they saw glimpses of the island when the small boat came over the top of the swells.

After visiting the Shell dock and taking on a supply of lubricating oil they put under way for the city float. Here are Mr. Bucey's own words describing Victoria's welcome to the yachtsmen: "I was extremely pleased to find that one could moor his craft right in the heart of town, less than a stone's throw from the Empress Hotel. Those Canadian people have a way about them to make a person feel that he is certainly welcome to their ports."

The palatial yacht Aquillo from Seattle came in later, as did the trim yacht, Robt. G. Seymour, also from the Queen City. The owner of Seymour, a Mr. Burson, and Mr. Bucey had quite a seafaring chat, as they were acquaintances in Seattle.

a Cruise

Part II

By

M. A. DALBY

Secret Cove mooring

An ambitious marine reporter from the Victoria Colonist interviewed the crew of Wee Yot. As result, a real, salty yarn appeared on the boating page of that good sheet the following day. To show how a fellow likes to play up the unusual in life, Wee Yot was given ten fold the space of either Aquillo or Seymour. The news value there was the unusualness of the expedition; the struggle against the elements in such a mite of a boat, but yet a vessel that was complete and well equipped even to its diminutive power plant.

Early one day they reluctantly cruised away from Victoria. A few miles out a large school of porpoises greeted them as they set their course for Nanaimo, about one hundred miles north of Victoria. Before the sun had accomplished a day's work they were safely moored in Sydney harbor. There they met a man who gave them many valuable tips concerning the British Columbia country. He was Scotty Bishop, a member of the B. C. police, which ranks similar to the Royal Mounted in traditions. Among other things Mr. Bishop used a motorboat, an automobile and occasionally an airplane in enforcing the law. He made the rounds of many islands to enforce fire, hunting, fishing and various other laws of the Dominion. The world is small after all, for, in the course of their conversation, it developed that Mr. Bishop knew Mr. Bucey's uncle, a river steamboat operator on the Stikine out of Wrangell, Alaska.

July 26th and eight bells for eight a. m.! With one pop the Johnson spoke and they were away. A day of sunshine, smooth seas and a very happy, carefree crew. Into Ladysmith they glided the good ship. Ladysmith is a quaint little coaling town, of particularly picturesque setting. Many passenger and freight ships plying in the Alaska run, stop at Nanaimo and Ladysmith to bunker coal, the business having receded in the last few years with the inception of oil engines. Just across the bay from Ladysmith they found an anchorage that a yachtsman dreams about. Mr. Bucey did the trick and he is truly a culinary master! With the wind whistling softly through the pines they dreamed of Indians, outboards, and wild life in the open.

About the time the fish started to jump in the stream or the birds voiced their raucous calls from the tall timber, Wee Yot was under steam for Dodd's narrows. Man, it's more than a thrill to navigate Dodd's narrows in a small boat. Many fisher folk with one lungers were standing by for more favorable tides. Wee Yot shot through unhesitatingly! A man on the bank stood with mouth wide open and ears erect, as they skipped o'er the mill race. There is the home of white water! Spray sizzled from the bow and leaped four or five feet into the air. Their Johnson settled down to work and plugged away, carrying them through the swift passage with safety and comfort.

Locks at Ballard, through which they passed

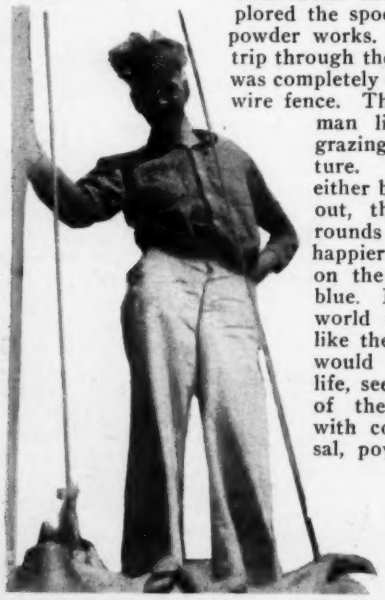
A few miles from the beaten trail, but still not so far

In Secret Cove

Gallows Point Light was abeam 10.51. Under a strong head wind and heavy sea they continued their Northbound trek. Wee Yot rolled and pitched, a huge twister occasionally saturating the housing of the ship. Before noon Gerald, the skipper, guided her safely into the pleasant harbor of Nanaimo.

Two bells and five p. m. they put away. Several hours later Nanoose was abeam, Wee Yot anchoring in the harbor near the gigantic plant of the Canadian Giant Powder Company, an institution that furnished hundreds of tons of powder when the shots and shells were heard the world over during the Great Conflict.

Although the ship did roll from the swells the ground tackle held, both men sleeping very comfortably in the trim cabin. Morning and they explored the spooky grounds of the powder works. It was a ghastly trip through the huge plant, which was completely encircled by a high, wire fence. The only sign of human life was two cows grazing in a nearby pasture. Expecting to be either blown up or thrown out, they completed the rounds and probably were happier to be out and back on the trail of the open blue. If all men of the world could make a trip like the Bucey's did, they would invariably enjoy life, see the good in place of the bad. Therefore, with contentment universal, powder works would not be essential in the worldly scheme of living, except, perhaps, to manufacture shells for big game hunters.



The first officer. Boyd Bucey in person

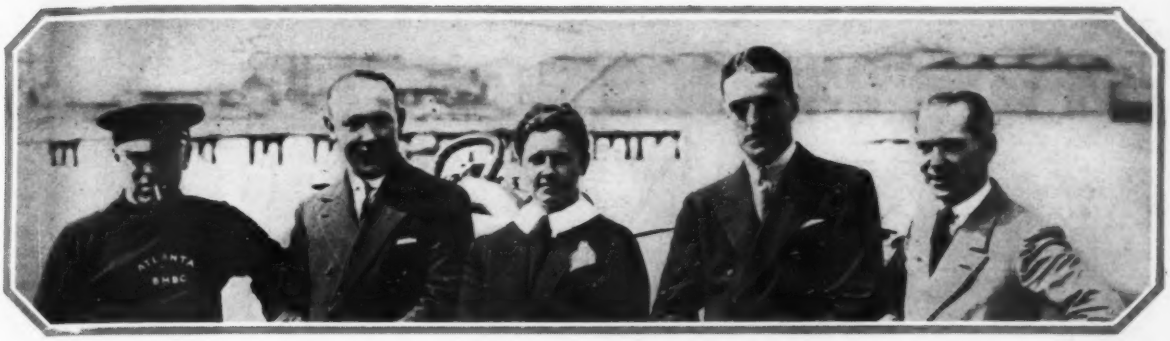
Pointing their tiny craft for Northwest Bay they finally anchored by nature's wonderland. A sparkling waterfall probably several hundred feet in height, twisted down from the hills and splashed into the sea below. Boyd filled the canteens with water—water that was cool and clear from the B. C. hills.

Heavy weather ahead! Ploughing by Texada island, the ship encountered huge seas. Not from fear of the elements but mostly to have target practice in preparation for bears and other animals, they hauled to in Malspina Strait. There, young Boyd Bucey proved that he was the original Dead Eye Dick, out-shooting his dad from three different positions and at four different distances. (Resolved: That University R. O. T. C. makes good marksmen!)

Powell river abeam! Powell river, the New York City of the Canadian wilds. With electrical power to throw away, they keep the great white way illuminated all night in that town. The city is probably one of the best lighted communities of its size in the world. An immense paper company owns the town and all of the town's assets. Buceys increased their knowledge of how newspapers are supplied with their paper, by inspecting the gigantic mill.

With their ship anchored for the night outside of the breakwater they found a heavy sea running when they returned from a theatre at about 6 bells and 11 p. m. It was a rough ride in the dinged dinghy but once on board, they put out another (*Continued on page* 52)

Photographs by Photo Press



The crew which will man the British challengers for the Harmsworth trophy. Left to right: J. Harris; Arthur Bray; Miss Carstairs, owner of the challengers; Captain Marshall; and F. J. Hyde-Beadle, designer of the boats

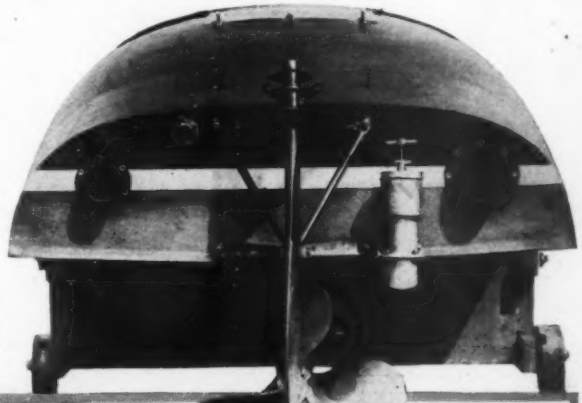
England *Challenges* *for* Harmsworth Trophy

Races for World Championship to Be Held at Detroit, Mich., September 1, 2, and 3 Under Auspices of Yachtsmen's Association of America

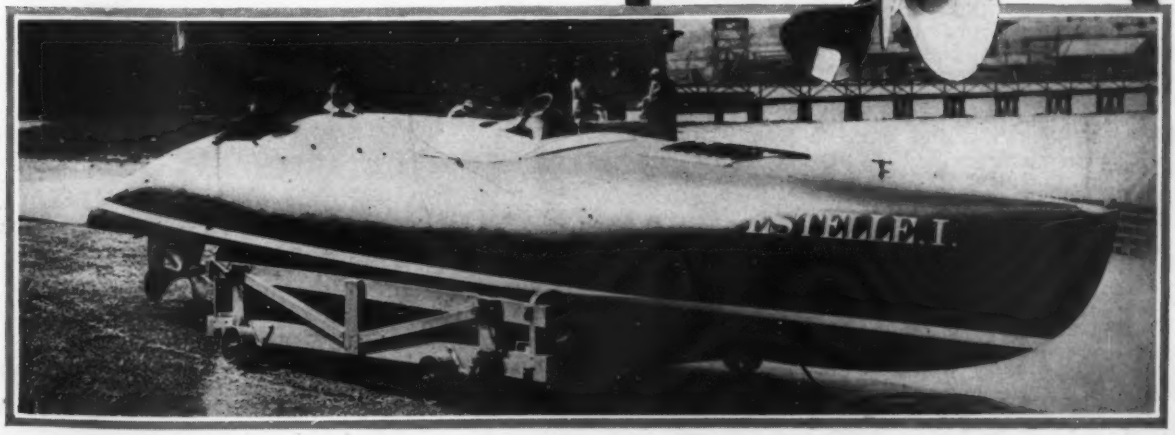
THE major racing event of the year will again be held at Detroit, Michigan, under American Power Boat Association sanction. With the falling by the wayside of such imporant annual racing events, as the Gold Cup, the President's Regatta at Washington, the Baltimore and Boston events and several others which will not be held in 1928, the Detroit regatta gains even greater importance. But the real feature which puts Detroit far in the lead is a race for the British International Trophy, also known as the Harmsworth Trophy, emblematic of the unlimited, free for all, speed championship of the world.

England has challenged for the British International Trophy and America must defend. As was to be expected, the American Speed King, Commodore Gar Wood, of Detroit, has been called to arms. He has responded as he usually does and already has plans well underway for building three new speed craft as well as reconditioning Miss America V, the fastest boat in America at the present time.

Gar Wood's tentative plans for new boats provide one twin screw craft with 900 horsepower, one with 1,600 horsepower and a single screw installation with 800 horsepower. Several other American sportsmen have shown an interest in building boats for one of the American team of three boats, which by the rules, is permitted to defend the trophy.



A stern view of the British challenger, Estelle I. This boat is powered with Napier racing Lion engines



Estelle I, one of the boats which Miss M. B. Carstairs of London, England, is bringing to America to race at Detroit on Labor Day

Photographs © Fox, London

Miss Carstairs and her associate pilots in the two new British International Trophy challengers which will come to Detroit in an attempt to take this trophy back to England

England is in earnest this time in her effort to lift the trophy. Two boats have been completed in England and there is a possibility that a third will be sent to America. Miss M. B. Carstairs, the challenger, will drive one of the boats, so it is reported, with Arthur Bray driving another and Captain Malcolm Campbell, the third.

The dates of the races are September 1, 2 and 3, at Detroit, Michigan, under the auspices of the Yachtsmen's Association of America, with W. D. Edenburn as chairman of the race committee. One 30 nautical mile heat will be held on each day until one country has won two heats.

Since 1903 in the thirteen races which have been staged, England has been successful in winning five of the events, France has won one and America seven. The U. S. competition for the trophy was never of any great import to the motor boat fans and yachtsmen of the Middle West until eight years ago when Commodore Gar Wood went to England and lifted the cup for the Detroit Yacht Club, although it was necessary under the international rules that he represent the national body. Thus he raced for the Motor Boat Club of America, but the trophy came to his own club, the Detroit Yacht Club.

The first boat from this country to race for and win the trophy was the Dixie I. A matter of two decades ago the first of this famous family of speed boats was built by the late E. R. Thomas, of Buffalo, whose name played such an all-important part in the beginning of the automobile industry. However, before Dixie I raced for and won the International Trophy, Mr. Thomas had disposed of the boat to E. J. Schroeder, of Jersey City, a sportsman who was interested in speed and who backed the famous Ralph DePalma in his campaign of 1912 with the German Mercedes.

Mr. Schroeder sent Dixie I and her crew to England in 1907, and on the waters of the Solent she gained a victory, showing a speed of 31.78 miles an hour. As soon as he had won the race he was challenged by the English sportsmen and he accordingly built a new Dixie, the second of the clan, successfully defending the trophy at Huntington Bay, L. I., the following year. There was no race for the trophy in 1909 but in 1910, the English again challenged and F. A. Burnham, who had purchased Dixie II from Mr. Schroeder, built Dixie III and was successful in defending the trophy, at a speed of 36.09 miles an hour. The English were not to be denied and again challenged for the B. I. T. in 1911, which Burnham defended on Huntington Bay, with Dixie IV and won at a speed of 40.28 miles an hour. It is very interesting to note that in all the campaigns of the Dixie clan of motor boats, whether owned by Thomas, Schroeder or Burnham, that not one was ever defeated.

In 1912, Sir E. Mackay Edgar, the English baronet, was successful in lifting the bronze plaque and taking it back to England with Maple Leaf IV, the first of this family of Saunders-built hydroplanes to win the big race, at a speed of 43.18 miles an hour. He repeated with the same boat in 1913 on Osborne Bay, in England, showing a speed of 57.45 miles an hour, the first time that the international championship event had seen a boat top the 50 mile mark.

This brings us down to Detroit's participation in the trophy and most of those who read these pages are familiar with the fact that Commodore Gar Wood, for the Detroit Yacht Club, spent $100,000 in 1920 and took Miss America I and Miss Detroit IV, two twin engined single step Chris Smith-built hydroplanes, to England and on the waters of Osborne Bay defeated the English and French teams and set the present world's record for the B. I. T. of 61.51 miles an hour, in winning with Miss America I. A year later Sir Edgar again challenged and sent to Detroit Maple Leaf VII, which through a chain of circumstances did not provide any competition, and Commodore Wood loafed home at a speed of 59.75 miles an hour, winning the trophy a second time, but at the helm of Miss America II.

Particulars of Boats

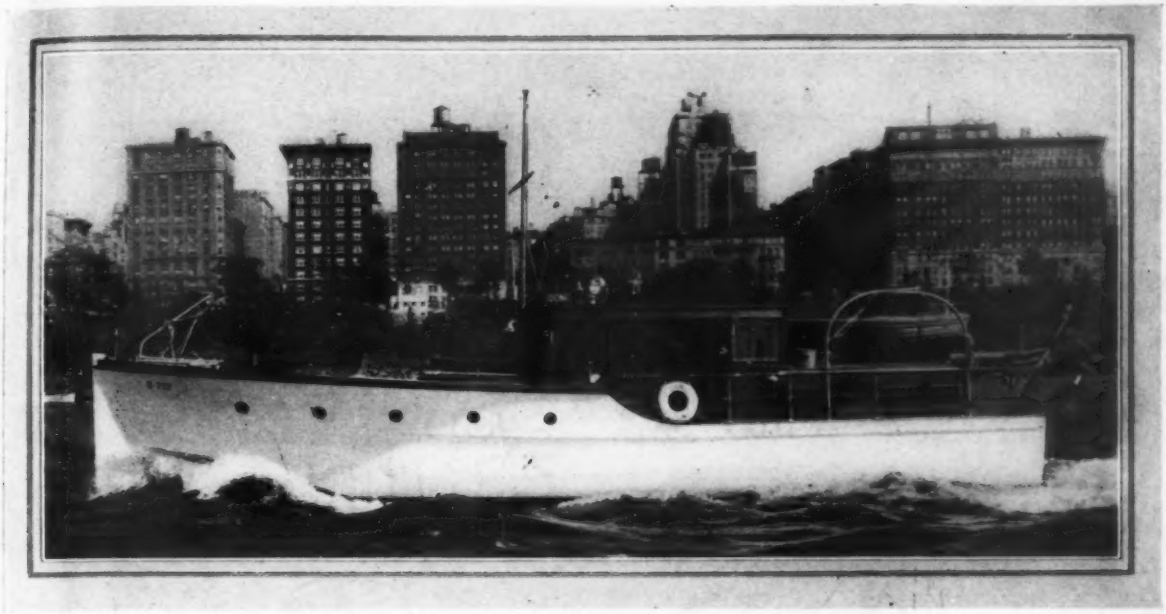
Great Britain is to make a serious attempt this year to recapture the British International Trophy for motor boats, which was won by America from Great Britain in 1920 and for which there has not been a challenger from Great Britain since 1921.

The British International Trophy is a speed race for motor boats which was instituted in England in 1903. Since that date it has been contested for on thirteen occasions. Five times it has been won by Great Britain, once by France and seven times by the present holders, America.

The Harmsworth Cup Race (as it was originally called after its donor) is purely a speed contest but it has helped considerably in the design and construction of fast motor boats.

(*Continued on page 132*)

Photograph by M. Rosenfeld



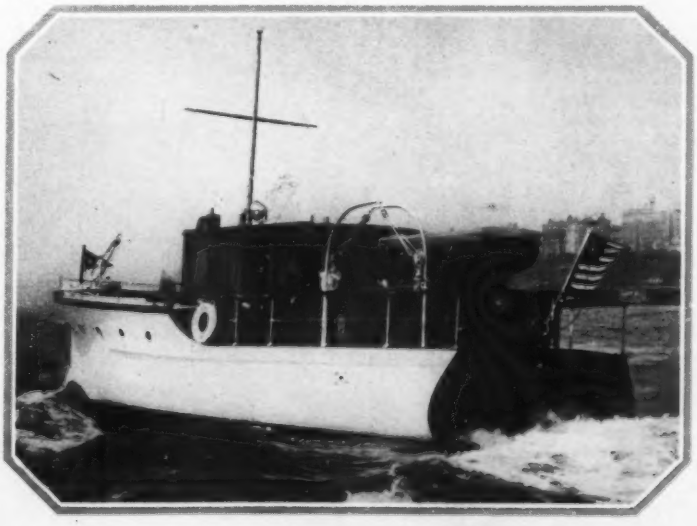
The 39-foot Cummins Diesel powered Humphrey cruiser, Idono, the first of this type to be seen in New York waters

The Small *Diesel Cruiser Arrives*

A 39-Foot Bridge-Deck Cruiser Powered with a Six-Cylinder Cummins Diesel Engine Easily Fills All Requirements of Owners

THE Diesel engine has at last come to the field of the small cruiser. A recently completed boat 39 feet in length is one of the earliest in the pleasure craft field to use a Diesel engine. This boat is the 39 foot Humphrey cruiser which is powered with a 60 h.p. six cylinder Cummins Diesel engine. The engine is a four cycle machine running on the full Diesel cycle. It is started electrically and reverses through the usual gear, being controlled entirely from the steersman's station. From external appearances the boat does not differ from the usual motor yacht of its size. It has the usual equipment, is a raised deck cruiser with a forecastle, galley, staterooms, toilet, lockers, and an after cabin also completely equipped. The engine is located under the enclosed bridge deck as is the usual practice.

She is heavily constructed and built according to the best design and practice—hard pine hull with oak members and full mahogany trim. The equipment is complete to the last degree. There is no question as to the seaworthiness, comfort, and the operation of the engine. All of these things have been more than fulfilled.



A stern view showing the trim lines and easy action under way

Her seaworthiness is beyond question. She was taken across Lake Oneida in a blinding storm with excellent results—all on board being perfectly assured of her capabilities—as for comfort she did very little rolling for a boat of her size and handles herself in a sea excellently.

The Diesel engine installed is most economical and drove the boat to Buffalo at a fuel cost of $8.40.

Start of a previous race to Block Island. Fuel is rationed to the contestants according to a formula devised by the Regatta committee of the Bayside Yacht Club

A Real Race

Auxiliary Sailor Men Keen to Try the Bayside-Block Island Race Under the Interesting Rules Adopted for This Contest

A NOVELTY in long distance races is the contest conducted by the Bayside Yacht Club and which will be held this year for the ninth consecutive time. It is today the first and only important race for sailing yachts which are also powered with auxiliary engines and which permits both to be used under the conditions of the contest. The course for this race takes the yachts down the entire length of Long Island Sound beginning at the Bayside Yacht Club, sailing completely around Block Island and then returning again to Bayside.

The conditions under which the race is run have been gradually improved until today they meet the conditions for this contest perfectly. Gasoline for the engines in the boats is distributed according to a formula which involves the dimensions of the boat. The discretion of the captain in charge determines during what stage of the run he elects to consume his gasoline so that the race is not alone a contest of skill in navigation but also a test of the ability to determine whether a boat would benefit at any particular moment by the use of the engine or whether it will get along as well with the sail alone.

A dinner recently called together the owners of twenty-one yachts with their crews and the officials of the club at which the conditions for the coming race on August 3rd were discussed. About one hundred men were present and Eugene F. Hartley, Chairman of the Regatta Committee acted as toast-master. A feature of this pleasant evening was the presentation to the club of the William H. Johns trophy which is to be awarded annually to the club whose colors are flown by the yacht which wins the race. In the contest last year eleven different clubs were represented, and the donor had the pleasure of awarding the trophy to his own club since it was won by the auxiliary sloop Rambler owned by Alexander Girtanner. Commodore John W. Ripley of the Bayside Yacht Club accepted the trophy on behalf of the club.

The William H. Johns Trophy, awarded annually to the winning yacht in the Bayside-Block Island race.

The trophy itself is a beautiful bronze Chelsea Ship's Clock with a carved mahogany base. It is over 4 feet in height and suitably engraved, while on the base the names of the winners each year will be recorded on small bronze plates.

It is expected and hoped that this trophy will arouse still greater interest in this contest among the clubs of the country. This year entries are expected from points as far distant as Boston and Baltimore. The conditions of the Deed of Gift make it possible for this trophy to be permanently owned by some club and several organizations have already expressed the intention of going after it on that basis.

TERMS AND CONDITIONS

FIRST: This trophy shall be forever held (*Continued on page* 96)

HUCK SAYS

I Proposes *to Go After Gar's* Florida - New York Record

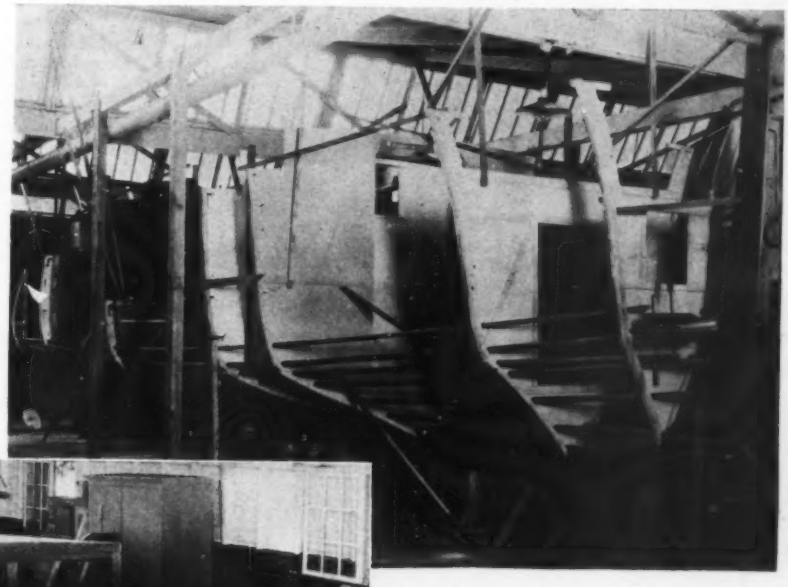
WELL Chap, I drops you these lines just to say that sometime during the month of July, I hopes to hop off from Fernandina, Florida bound for the Battery, with three other Tyrolean Mountaineers, in a Fairform Flyer.

The record what I am shooting at is the run what you and Gar Wood made in 1923. If you hadn't been along, the record, it would have been so low that nobody could touch it, but I understands from Gar that you wouldn't let them run the motors at night, so they has no option but to lay in at night. They goes awful fast daytimes but due to your beauty sleep, it takes you over 116 hours all told.

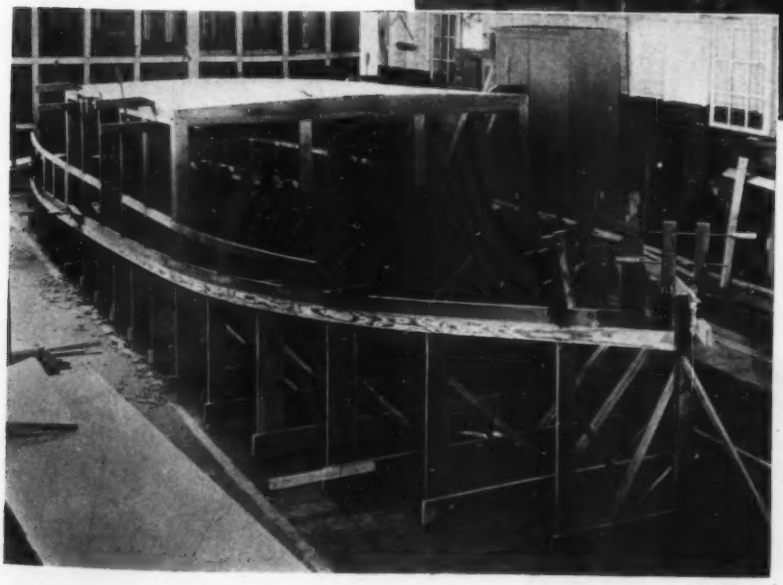
Now if we ever gets the boat finished and I doesn't get bumped off drinking the bad mountain dew what is coming in here nowadays, we proposes to make it a non-stop affair and hopes to make the Battery in about seventy hours. I writes Jack Farr, president of the Kermath Company a couple of weeks ago and says as how if maybe they sends down a couple of mechanics to manicure the motors enroute, why maybe we keeps them going continuous, which it would be some record in itself. Now they has wrote back and says as how Jack Farr he is sick, which it is a damn shame, but that we doesn't need no mechanics and that if I has brains enough to get them started and keep a little gas in the tank, they runs us to New York anyways, and perhaps beyond.

I proposes to leave Fernandina at about three o'clock in the morning so that they will not be any girls down there to kiss me good bye. I simply hates to mix my business with pleasure Chap. We are going to run outside to Charleston, and if we doesn't run out of gas before we gets there, we expects to meet some fuel at the extrance of the harbor. With good luck daylight will find us off'n the Beaufort Bar. We then runs inside to Norfolk, picks up more fuel on the wing, again takes to the Atlantic, drops into Atlantic City for a minute for the last tankful and is scheduled to make New York before dark.

(*Continued on page* 98)



The molds for Huck's Fairform flyer erected in his shops on the keel member



In another part of the shop the upper structure is being built to be set on the hull later

The CROSBYS of CAPE COD

A Famous Family of Boat Builders Who Have Grown Up With The Cat Boat Invented Some Eighty Years Ago By Grandfather Crosby

By Gregory Mason

Herbert F. Crosby, old H. F. who still enjoys cruising after 70 years in boats

Typical Crosby Cats as built by the present generation of the famous family

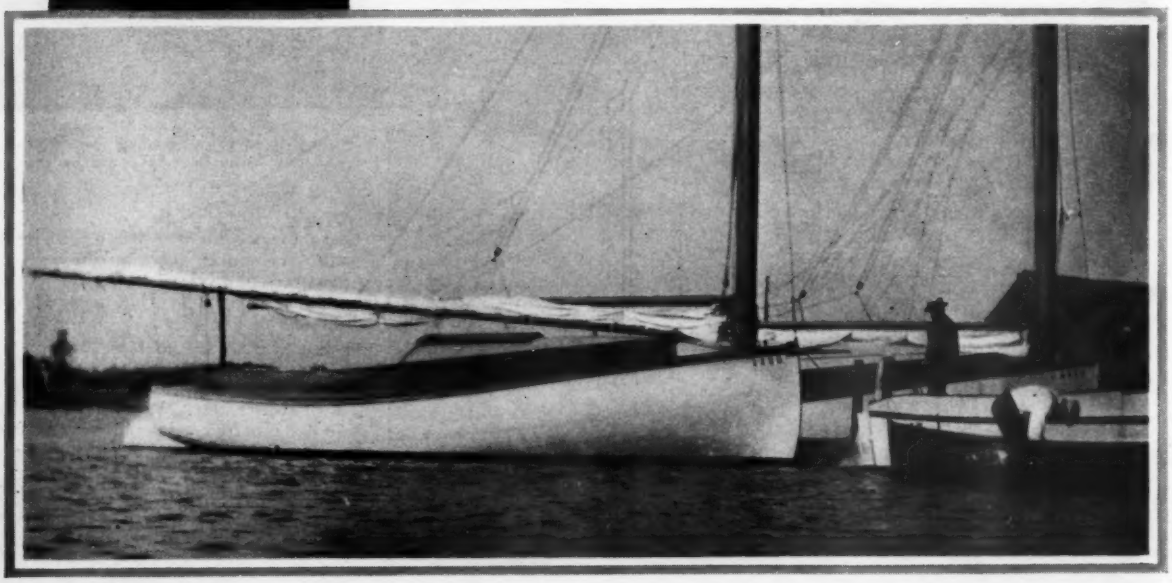
AN old man sits alone in the loft of a boathouse. A widower who does not need more than a good mooring and fair swinging room, he has rented his comfortable residence hard by to city people for the summer. He is alone but not lonely. About him in the loft are the relics of a long and successful and very happy life, the iron, woodburning stove and the big four poster of the days before such emasculated institutions as steam heat and twin beds were invented, little treasured trinkets his wife wore most of her life hanging on the wall beneath the model of the first boat he built.

Alone but not lonely. All day long and all summer long people who are spending their vacations on Cape Cod come to see him; men with names which beget the silence of respect and awe when they are mentioned in business, banking or legal circles, men who have never forgotten in the bustle of commerce to love the beauty which lives in boats come from one end of the Cape to the other to pay homage to old H. F., Herbert F. Crosby, the oldest of the famous Crosbys of Cape Cod, inventors and builders of the staunchest and ablest of catboats.

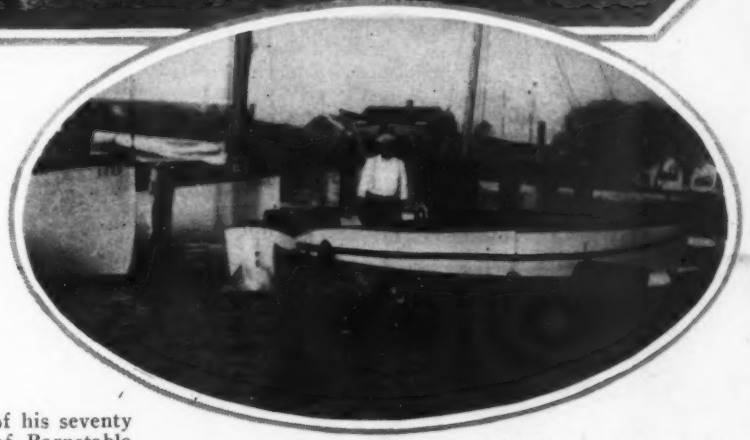
Perceiving me trudging up the little pier through the drizzle the kind old boatbuilder calls from his window:

"Come up Cap'n, an' dry out, an' take the weight off your feet."

When I have climbed stairs as narrow and steep as a schonoer's companionway, Captain Crosby indicates a comfortable chair beside his rocker, the rocker in which



Water front side of the boat building plant of H. F. Crosby and Sons



Old H. F. the oldest living Crosby in his little power cruiser, with the bows of two 25-foot cats built by his sons, showing at the left

he has sat through innumerable evenings of his seventy years and read the Bible or the news of Barnstable County to his wife while she made clothes for their sons, now tanned and sturdy men with graying hair. Except for the kerosene stove in the corner on which Captain Crosby gets his own meals in the summer nearly everything under the rafters of this small room is old, old but ship-shape and in apple-pie order. And packed with associations for the owner, I realized at once. As he looks through the western window over the narrow harbor between West Bay and Cotuit Bay H. F. gazes on stout beamy catboats, slim, graceful knockabouts and trim, fast motor boats immaculate in varnished mahogany. Most of them were built by him, or his sons, or his brothers or his brothers' sons. For the Crosbys no longer confine themselves to the construction of the cats which made them famous, first from Provincetown to Boston, and later wherever there was appreciation for a sailboat, suitable for shoal waters yet quick to handle and strong to face treacherous tides and heavy winds. There is a little wistfulness in this eyes, perhaps, but more of pride and happiness—the look of a man who hankers for some things which have passed but who knows he has had more than most men.

"So, Cap'n, you want to hear about the building of the first Cape Cod cat?" His voice is somewhat high, and gentle as the southwesterly airs of many bygone summers.

Before he can begin his reminiscences there is a patter of bare feet on the stairs. A sunburned girl of twelve or so is followed into the loft by a boy of about the same age who carries a bucket of clams.

"Granpa, we thought you might like some clams," says the boy.

"Clams, why yes, I like clams. When did you get them?"

"Just now, Granpa, they're fresh."

With hardly any sign of age in his movements the old man rises and makes to pour the clams into a dishpan.

"But Granpa, you can keep the pail."

"No, I don't need it. But I like clams. Yes, I like clams. Thank you."

The children patter away. And again it is obvious that Captain Crosby is not lonely. Not exactly, yet—

"That's my little cruiser," he says, pointing at a small motor boat lying at the pier between a big white and mahogany cat of 1927 and a small gray cat of 1897. "I guess I can't get in my regular cruise this year, the weather's too nasty. Every year I've been taking the last two weeks in August for a little cruise, just over to the Vineyard, you know. My wife used to always go with me, even the last four or five years of her life when she was crippled and my sons and I had to lift her into the boat at the start of the cruise and lift her out at the end of it."

"You go all alone now?"

"Yes, all alone. But I shan't get a cruise this summer, the weather's been too nasty—I hardly remember a summer with so much fog and so many easters—and even if it clears up now it's too late. But you want to hear about the first cat.

"My father and uncle invented her, that is, Horace Crosby and Worthington Crosby. That must have been a good eighty years ago, long before Cape Cod had concrete highways and gift shops along 'em enough for a man to spend a fortune in a couple of miles. There were no summer visitors then, but I guess summers was just about as rushed as now, what with fishin' an' oysterin'.

"My father's father built his own ships and sailed 'em. He had a ship yard over there." The old man pointed to a vacant field upwards of a hundred yards northwest of the plant of his brother, Manley Crosby.

"What kind of vessels?"

"Grandfather built coasters, schooners. He had to build 'em seaworthy, of course, but he had to build 'em shoal enough to beat outa Cotuit Bay, an' that meant pretty shoal in those days. On one voyage he saw the

(*Continued on page* 80)

Big Stepper,

A Racing Hydro

Plans and Specifications for an Up-to-the-Minute Racing Craft Designed for Maximum Speed with Class C Outboard Engines

Designed by L. J. Johnson

ONE of the most popular forms of boating in these days of speed is the high speed racing hydroplane driven by an outboard engine. A series of designs for boats of several sizes has been prepared by L. J. Johnson and the first of these is published here. This little boat is twelve and one-half feet in length and designed particularly for engines of class C, that is, not exceeding thirty cubic inches piston displacement. The progress which has been made during the last year or two in boats of this type has been so rapid and astonishing that it takes a keen engineer to keep pace with it. This little boat can be said to embody all of the most recent thoughts and developments in this field, so that any who builds according to this design can be assured of a speedy and reliable little craft.

The first operation necessary in the construction of any boat of this kind should be the careful study of the drawings and specifications which accompany the design. Construction of boats of this nature follow the general practice and methods which have been developed by years of experience. The table of offsets will give all necessary dimensions for laying out the several frames for the little hull and it is important to remember that the dimensions given in the table are the outside lines of the boat, so that it will be necessary to deduct the thickness of the planking on both sides and bottom in order to arrive at the neat lines of the frame. The thickness of planking called for is one-quarter inch, so that the full size drawing which must be prepared for each frame will show the outside line of the hull determined by the dimensions, and also an inner line one-quarter inch away which will be the line to which the frames are sawn. After all of the eight frames and the transom have been built up according to the information and the specifications, they are assembled on the keel and erected so as to maintain the correct relation with the base line at all points. Particular care should be exercised at station number six where the step occurs in order to make sure that the little detailed drawing at this point is carefully followed. The chine piece which is let into the corner of the frames is a piece three-quarter inch square, which is then cut and shaped throughout its length to fit the lines of the boat. Seam battens also are required and should be carefully notched into the frames throughout the length of the boat so that they fit snug and without twisting. These should be so arranged and spaced as shown on the drawings so that there will be four planks on the bottom of the boat and two on each side. The specifications provide for screw fastening and several parts together and also call for the sizes of screws necessary.

Amateur boat builders should be cautioned particularly against attempting to improve on the designer's work. Do not use heavier frames, planking, or other materials than called for. The object of this boat is to produce a light weight hull which will be substantially put together and still be of light weight. A speed boat such as this will depend for its ability on its lightness and the power of its engine. In order to secure the best and most satisfactory results the drawings should be followed carefully. At the sheer line there will be a clamp and an inwale which form the structural members at this point. They run continuously from end to end and are tied

(Continued on page 92)

TABLE OF OFFSETS FROM FULL SIZE LAYOUTS

HALF BREADTHS

STA. NO.	0	1	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	10
SHEER		8-12	15-7	19-2	21-13	23-12	25-1	25-15	26-7	26-10	26-10	26-7	26-1	25-9	24-14	24-1	23-2	21-8
CHINE		5-7	11-4	15-1	18-4	20-14	23-0	24-9	25-10	26-5	26 10							
MAIN CHINE											26-10	26-10	26-10	26-10	26-10	26-10	26-10	26-10
BAT. CHINE											25-2	25-2	25-2	25-2	25-2	25-2	25-2	25-2
14° W.L.											26-10	26-10	26-9	26-8	26-6	26-4	26-1	25-12
18° W.L.											26-10	26-9	26-6	26-2	25-12	25-4	24-10	23-10

HEIGHTS ABOVE BASE

℄ OF BOAT		13-1	10-14	9-11	8-10	7-12	7-2	6-12	6-7	6-3	6-0							
℄ OF BOAT											8-14	8-2	7-9	7-2	6-14	6-10	6-6	6-0
CHINE	21-6	18-5	15-9	13-11	12-0	10-9	9-6	8-7	7-11	7-4	7-0							
BAT. CHINE											11-0	9-11	8-13	8-3	7-14	7-10	7-5	7-0
MAIN CHINE											11-0	10-1	9-6	8-15	8-10	8-6	8-2	7-12
SHEER	26-4	25-13	25-6	25-1	24-12	24-6	24-1	23-12	23-7	23-2	22-12	22-7	22-2	21-13	21-8	21-3	20-14	20-6

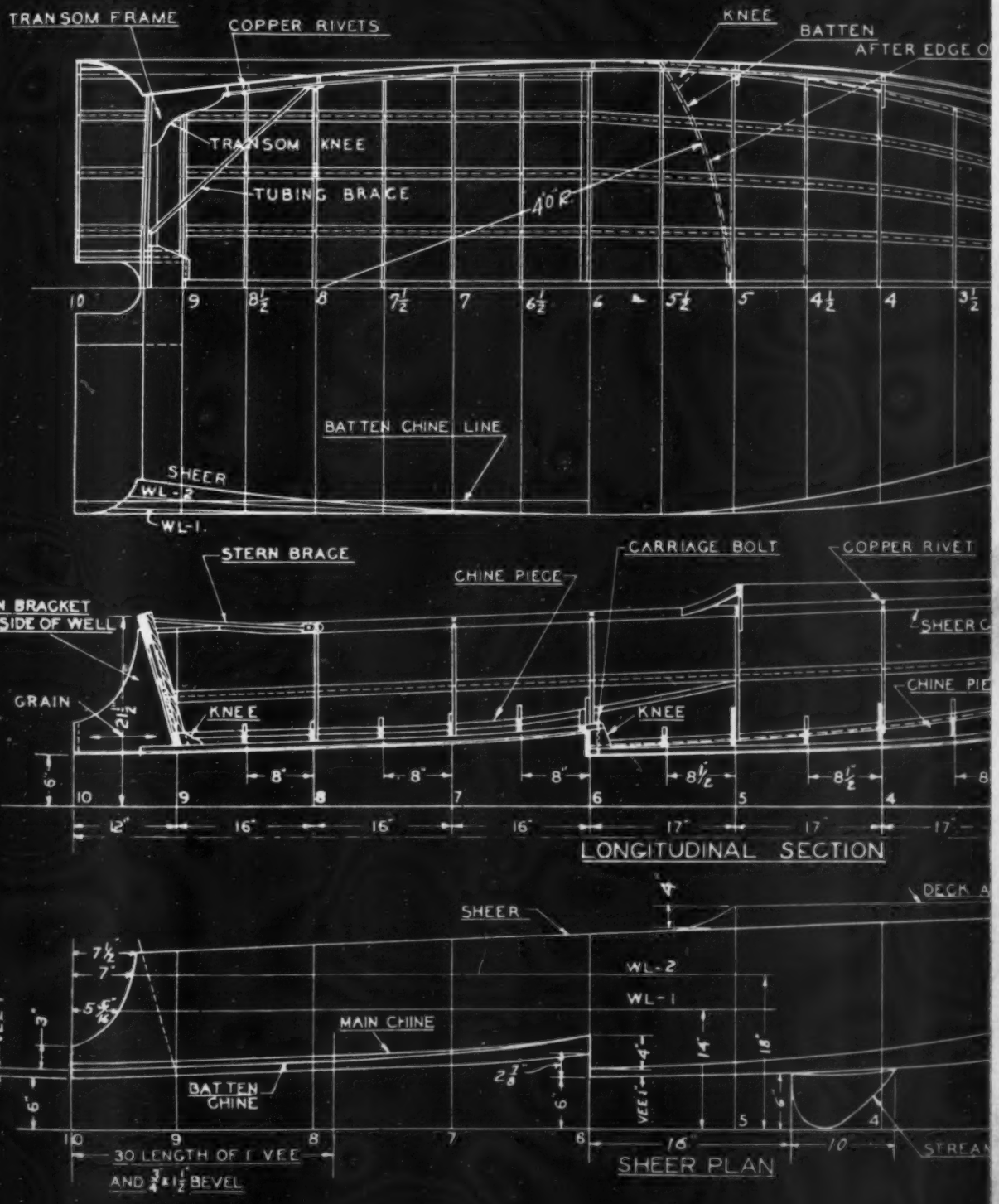
OFFSETS GIVEN IN INCHES AND SIXTEETHS TO OUTSIDE OF FRAMES—DO NOT SCALE DRAWING

Table of offsets of the 12½-foot hydroplane, Big Stepper

MoToR BoatIn

Build A Bo

Series



The Amateur Boat Builder

A Series of Helpful Articles Teaching the Correct Method of Boat Building from Start to Finish, Intended Particularly for the Unskilled Amateur Who Is Building His Own Boat

By H. W. PATTERSON

Part II—Continuing the Work of Laying Down the Lines

IN the previous chapter we got a good start laying down, and left the job with most of the drawing finished on the profile and half breadth plans. We will continue from there.

BODY PLAN. See Fig. 2. It is assumed that a portable board has been prepared as previously suggested and that it is smooth and clean or covered with heavy paper. Along the bottom edge nail a base batten about ½ by 2 inches; bisect this and draw a center line perpendicular to the base. Then working from the various dimensions given on the body plan, draw the bow and buttock lines, water lines and diagonals. These are all straight and may be quickly drawn with a straight edge. If the keel is of uniform thickness, which is usually the case in power boats, draw a line each side of the center representing the half breadth. Pick up the corrected rabbet heights from the sheer plan and spot them on these lines, numbering each carefully, as it is a very easy matter to use the wrong spot at this point, especially in the middle body, when arranging the body battens.

Now nail a temporary batten on the left side of the center with its edge exactly to the line. Then with the pick up rod, on which you marked the corrected half breadths of deck, spot those for the fore body, at approximately the right height and draw an inch or so of vertical line. On these lines spot the corrected deck heights, which are also on a pick up rod, and draw a short horizontal line. Number these points with the section numbers. Mark the height of stem at its proper half breadth from the center line, in this case ½ inch. We now have a series of spots through which a line is drawn, with a suitable batten, showing the projected deck line in the fore body. Inasmuch as this line was faired in both the profile and plan views it follows that no fairing in the body plan is necessary, nor should it be attempted, as these heights and half breadths are now supposed to be fixed. It may be a peculiar looking line but it should be a fair one, and if it is not something is wrong and the work must be checked back to locate the trouble.

Next spot the offsets as given in the offset table on all the lines in the forebody, making a check mark with its Section number, at each point. An assistant to read the offsets will be a great help at this time, and the value of a batten for the base and center lines will be apparent, as it is only necessary to put the end of your rule or measuring rod against the batten, with assurance that it is right on the line. Spot all the offsets on one line, with one placing of the rod, to save time. When all the offsets are spotted in the fore body, reverse the center line batten and proceed in the same manner with the after body, and remove the center batten. At about this stage of the work the body plan will appear as shown in the illustration. In the fore body the offsets are all spotted and one batten is in place on Sec. No. 5. In the after body only the straight lines are shown.

At each spot, drive in a slim wire nail, and bend suitable battens to them (one for each section) keeping the battens in place with a necessary number of nails driven on the opposite side, as described for the stem. Each batten should be planed to fit its particular section, thinning where necessary to suit the curve, and they should extend six or eight inches above the deck line, and if possible beyond the center, so that it may be faired beyond the limits of the boat. It often happens that the battens are crowded at the rabbet line, probably crossing, in which case they must be planed thinner and allowed to lap over each other.

When all the battens are down the real work of fairing begins. The ends are all fixed so whatever regulating is required must be done between the sheer and rabbet lines. Make a very careful inspection to the end that these battens may be faired with a minimum of change. To anticipate the story a little: the fairness of the boat is checked later by

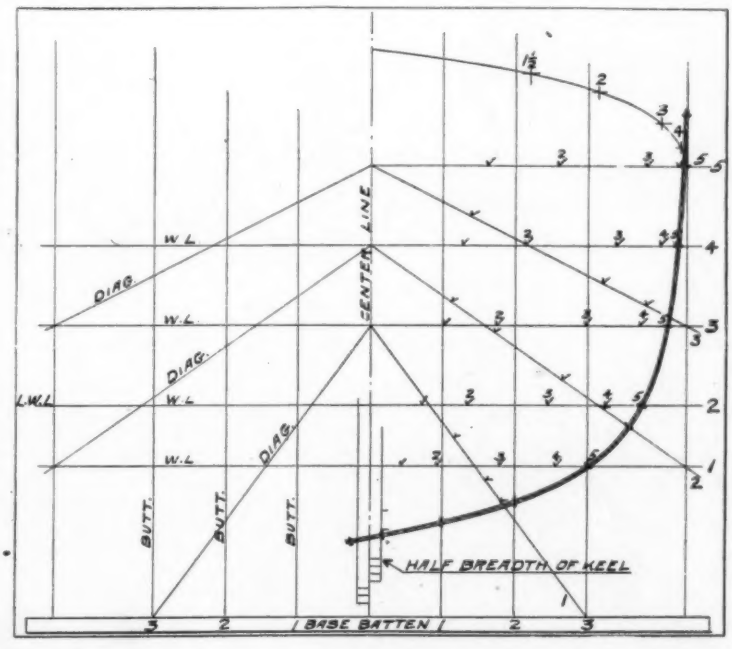


Fig. 2—The body plan used for obtaining the outline of the hull at all section points

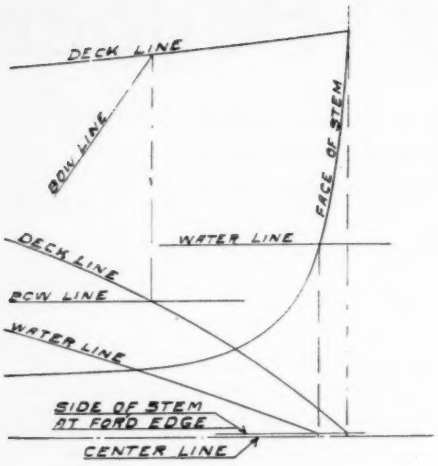


Fig. 3—The method of ending a water line

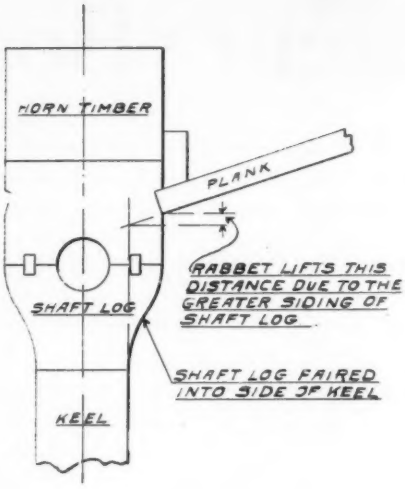


Fig. 5—How the rabbet is lifted where the shaft log increases in thickness

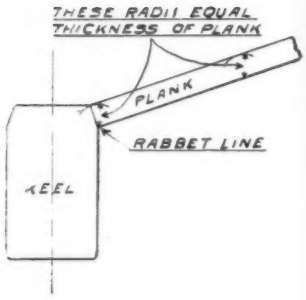


Fig. 4—Locating the top of the keel and the bevel of the rabbet

lifting corrected offsets from the body plan and running the various water lines, diagonals, etc., in the profile and half breadth plans, which, of course, must also be fair. With this in view the body battens should be regulated with due consideration given to the value of the fore and aft lines for fairing them. Lines that cross the sections in the body plan nearest at right angles are the best fairing lines always. For this reason diagonals are usually good throughout the boat, especially in the bilge. Buttocks are good in the after under body, in fact are the only reliable lines in flat sterned boats. Water lines are reliable in the top sides throughout and under body forward but of little value in the after under body.

If it appears that the spots on any one line are slack or full on several or all the sections, it may reasonably be assumed that the given offsets are in error for some reason, and the nails drawn so that the battens may assume natural curves. Shift other spots as judgment dictates until all the battens are fair. If the lines have been drawn to a reasonably large scale, say ¾ inch to the foot, the necessary corrections should be small, not exceeding ¼ inch, except perhaps where the lines cross very obliquely, in which case the offsets may be disregarded and dependence placed on more reliable spots. It must be kept in mind that a surface is now being faired and not individual lines, so when fairing one batten its immediate neighbors must be considered as well. It is quite possible for three consecutive sections to be individually perfect yet the surface they represent may be far from it. This first adjustment of the body battens is very important and if well done will greatly simplify the work to follow.

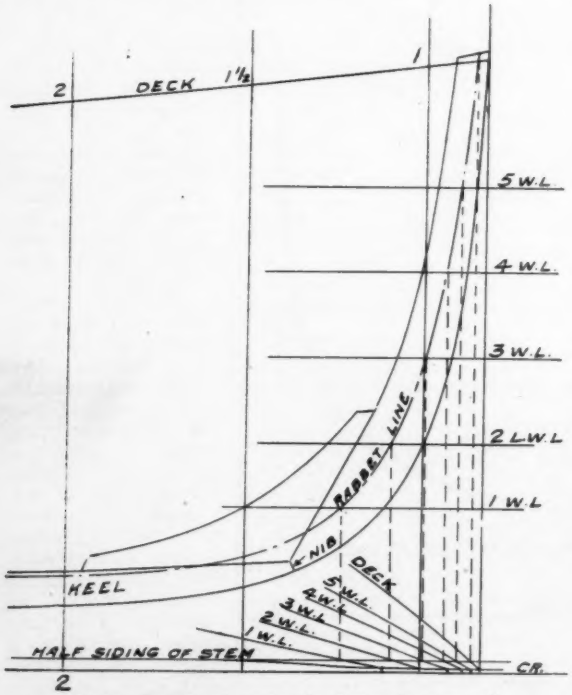


Fig. 6—Locating the points for faring the stem and locating the rabbet line

When all the battens are regulated to your best judgment they must be checked in the profile and half breadth plans. Start with the bilge diagonal. Lift offsets from the body battens on a rod, and run a batten to them in the half breadth plan. Note any unfairness and again study the body plan so that the diagonal batten and body battens may be regulated to make all fair. Should there be any doubt as to which spots are best to hold and which to alter, another line cutting near the doubtful place should be run before making a decision. As these fore and aft lines are not drawn on the floor it is a matter of only a few minutes to run a batten. It may pay the amateur to run several lines before making any changes in the body battens.

Proceed in the same manner to test and fair all the fore and aft lines, working back and forth from one plan to another, shifting the body battens to suit, until all three plans agree and show continuity of form and fairness. There is no fixed sequence for running the various lines but an intelligent selection, guided by some previous hints, will simplify the work materially. It is generally best to run all the diagonals first.

After each water line is faired, draw in a foot or so at each end as shown in Figs. 6 and 7, as these endings are necessary to develop the stem and transom. Also draw short lengths of the buttocks at the transom for use later in expanding it, i. e., developing its true shape.

ENDING A WATER LINE. See Fig. 3. To find the forward ending of a water line in the half breadth plan, square down from the profile where it cuts the forward edge of stem, to the line representing the half breadth of the stem on its forward edge. In this case it is ½ inch from the center line. If the forward edge of stem has a varying width the proper half breadth at that particular water line must be set out from the center line. The after ending for a canoe type stern would be found in the same manner. The after ending for a boat with a transom stern depends on how the lines are drawn. In the example used, definite offsets

are given on No. 9 Section so that the ending is very simple. It will be noted that this section is partly beyond the limits of the boat but it is a very practical way of handling the matter. Frequently the offsets are given on the transom and it is then necessary to obtain the position and shape of transom at the particular water line under consideration. To do this draw an arc of a circle with the proper center and radius and spot the offset on this, square out from the center line.

ENDING A DIAGONAL. The forward ending of a diagonal is obtained in the same way as a water line, except that the half breadth of stem is measured on the run of the diagonal, which is somewhat greater, due to the angle. The height where it starts from the center line is transferred from the body to the sheer and then squared down to the half breadth. In the example given each diagonal starts from a water line so that the fore and aft point in the half breadth plan is the same as the water line. Aft the diagonals end at an offset on No. 9 Section.

ENDING A BOW LINE. To end a bow line in the profile, draw a short length in the half breadth where it crosses the deck line, and square this point up to the sheer line. By referring to the drawing of lines it will be seen that similar points can likewise be obtained on the water lines, giving additional check to the fairness and more points for the bow line in the profile. However, as a bow line is a poor one for fairing, it is seldom used in the mould loft.

When satisfied that the body is fair, draw in the sections with pencil and remove the battens. These lines represent the outside of plank which should now be taken off. With a pair of pencil compasses, set to the thickness of plank, draw little arcs about six inches apart along each section line, as shown in Fig. 4. Bend a batten to these and draw it in which gives the inside of plank and is the line to which the moulds are made. While this is not an exact method, under all conditions, it is close enough for small boats.

From the rabbet line, at each section, draw a short line square to the plank. Where it intersects the inside of plank is the top of keel, and from it is taken the proper bevel to form the rabbet. See Fig. 4. The heights for top of keel may now be transferred to the sheer plan and drawn in. Now that the sections are drawn we can set off the various half breadths of the shaft log and deadwood and obtain the true height of the rabbet in way of these parts. See Fig. 5.

STEM. See Fig. 6. Square up from the half breadth plan to the sheer plan the points where the deck line and each water line cuts the full half breadth of stem. Draw a line through these points continuing the lower part and fairing it into the rabbet on the keel. This gives a cutting line for shaping the stem and in nearly every case is also the rabbet line.. The after side of stem

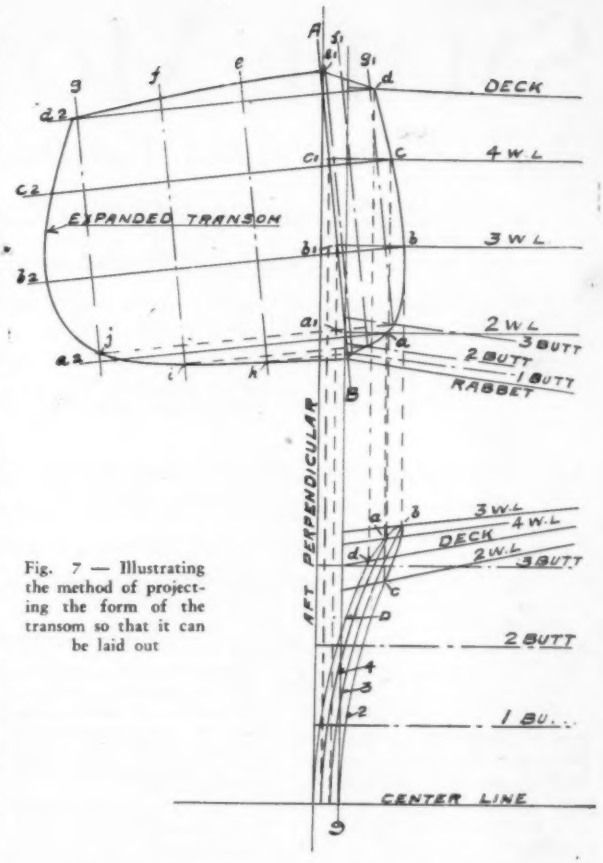


Fig. 7 — Illustrating the method of projecting the form of the transom so that it can be laid out

and its connection to the keel may now be drawn as shown on the lines or construction plan, or if not indicated, allow enough wood abaft the rabbet to give sufficient strength and good landing for the plank ends, with due regard for available material.

For small boats the stem is often made of a hackmatack or oak knee and fastened directly to the keel but in the majority of cases the stem proper is made of straight material and connected to the keel with a separate knee. Note that the ends of stem and keel, where they meet, have blunt ends, called nib ends. Allow sufficient length above the deck to suit the desired arrangement and finish of the bow. There is often a chock rail

(*Continued on page* 48)

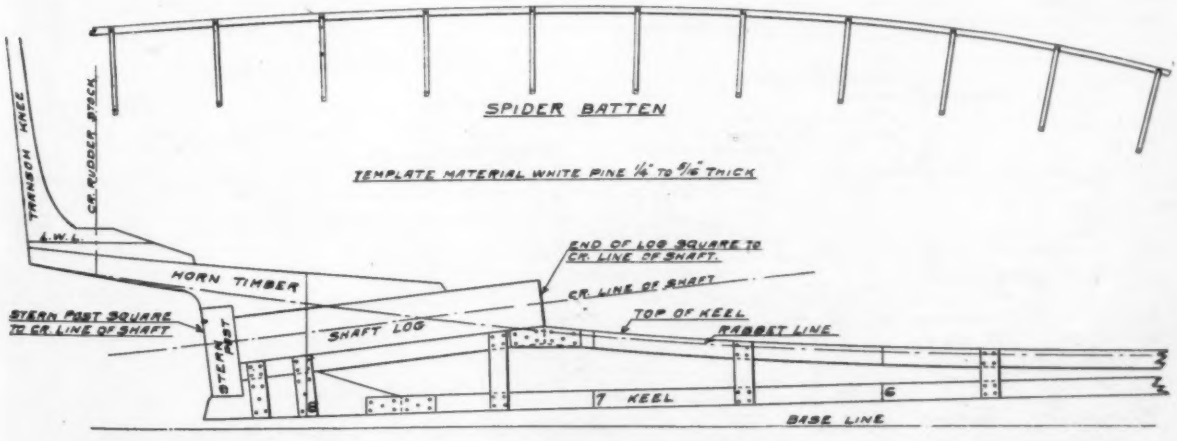


Fig. 8—A spider batten used to transfer long curved lines and a template for the keel member

SMALL MOTOR BOATS

Their Care, Construction and Equipment

A Monthly Prize Contest Conducted by Motor Boatmen

Questions Submitted for the September Prize Contest

1. What are the advantages derived from using a tachometer on an outboard?
(Submitted by J. R. B., Buffalo, N. Y.)

2. Explain the outfit necessary and the material and method for softening and bending frames, etc.
(Submitted by W. B. M., Newburgh, N. Y.)

Maintaining Engine Temperatures

Advantages of Correct Temperature Control Brought Out in Articles Which Recite Advantages of Uniform Heat and Methods for Controlling Same

Answers to the Following Question Published in the May Issue

What are the advantages derived by the installation of thermometers in the oil and water circulation system of the present type of engine?

Keep Tabs on Temperature

(The Prize-Winning Answer)

EVERYONE is more or less familiar with the thermometer located on the radiator caps of most automobiles where they are constantly in view of the driver, and knows that when the liquid expands and runs above the danger line scribed on the face, that the engine is is over-heating from some cause and that the motor should be stopped and the trouble attended to. Likewise, the thermometer or Motometer has a place aboard the motor boat for the same purpose, yet it will also prove a valuable asset in correctly adjusting the carbureter so that the power plant will be more economical in fuel consumption. Gasoline engines operate more efficiently at a temperature close to 200 degrees fahrenheit and if the carbureter is adjusted to run the engine smoothly when cool, or cold, after the engine heats up, it is receiving a richer mixture than is necessary. The thermometer, if installed in the water circulating line close to the engine, will permit a reading of the engine temperature after running for a short time, after which the carbureter may be adjusted to suit the condition. When starting up cold, it will probably be necessary to use the choke a slight bit more when the mixture is lean. The thermometer will indicate to the operator if anything is causing the engine to overheat, and if the water circulating system is by-passed, allow the operator an accurate method of controlling the cooling water.

For marine use, the dash type of thermometer is probably the best to use having the element located in the water line, or oil sump, the connec-

Rules for the Prize Contest

READERS are urged to consider the above questions for the September issue and send answers to them to the Editor, MoToR BoatinG, 57th Street at Eighth Avenue, New York, N. Y. Answers should be (a) in our hands on or before July 25, (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the senders' names and addresses.

The names will be withheld and initials used.

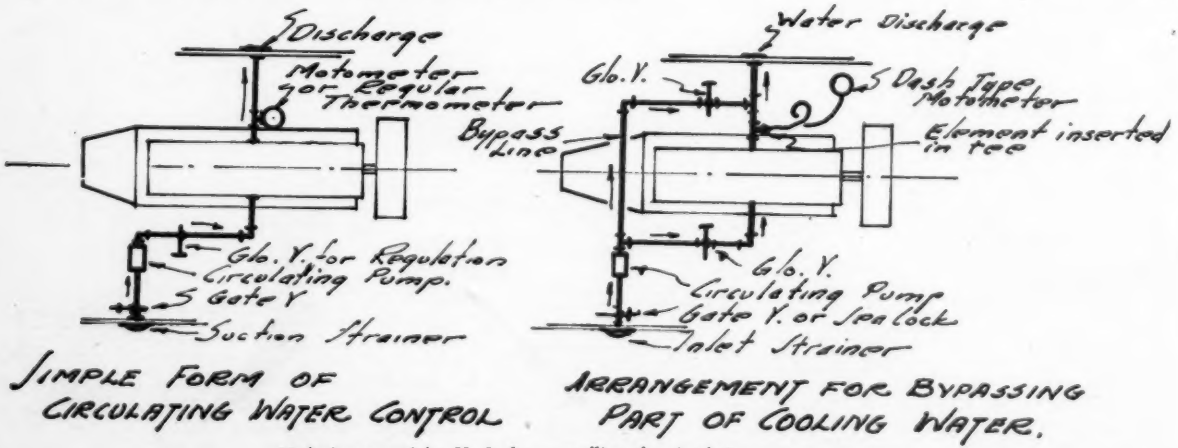
QUESTIONS for the next contest must reach us on or before July 15. The editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary.

The prizes are: For each of the best answers to the questions above, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price does not exceed $25, or a credit of $25 on any article which sells for more than that amount. There are two prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer both.

For answers we print that do not win a prize we pay space rates.

For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR BoatinG of which the advertised price does not exceed $5, or a credit of $5 on any article which sells for more than that amount.

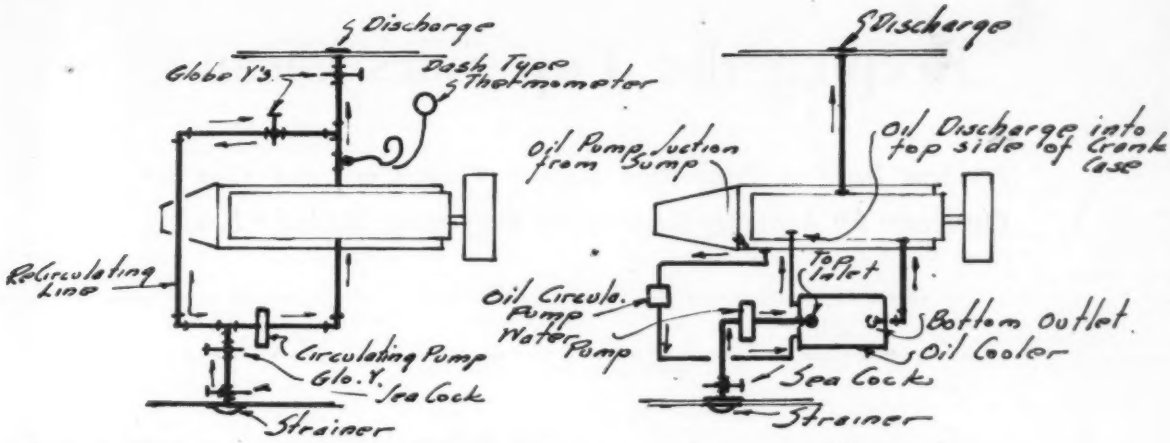
All details connected with the ordering of the prizes selected by the winners must be handled by us. The winners should be particular to specify from which advertisers they desire to have their prizes ordered.



SIMPLE FORM OF CIRCULATING WATER CONTROL

ARRANGEMENT FOR BYPASSING PART OF COOLING WATER.

Method suggested by H. S. for controlling the circulating water temperature



ARRANGEMENT FOR RE-CIRCULATING WATER WHERE SEA WATER IS COLD.

SIMPLE HOOK UP OF AN OIL COOLER

Another suggestion by H. S. for recirculating the cooling water and a suggestion for an oil cooling arrangement

tion between the two being made with a flexible tube furnished. Also, the dash type instruments read in degrees while the direct instruments are only graduated to show cold, running, and danger temperatures.

With a reading of over 200 degrees, the plant should be shut down and the cause of overheating determined, which will probably be found to be a stopped pump intake, or pipe line, although lack of oil will cause the engine to overheat.

Thermometers for oil temperature readings are seldom used except by racing hydroplane drivers who wish to keep tabs on the oil. It is good practice to use a thermometer for oil temperatures on large high speed engines where an oil cooler is used. Should the oil cooler fail to function, the thermometer will immediately denote the fact. The oil cooler is used to lower the temperature of the lubricating oil to keep up viscosity and for those that would like to construct such a unit, a sketch is given of its construction as well as several methods of piping up the water circulating systems showing locations of the thermometers.

The regular oil pressure gauge will also indicate lowered oil viscosity by showing a lower pressure than normal.

Mention was made of the use of the choker when starting cold, but do not use it any more than necessary, as some of the mixture which is practically pure gasoline will find its way into the engine crank case and dilute the oil.

The regular glass tube commercial thermometer with pipe threaded base may be used, but in brass its cost will probably be found to be more than the more common type instrument generally used.

H. S., New Orleans, La.

Protects the Oil Film

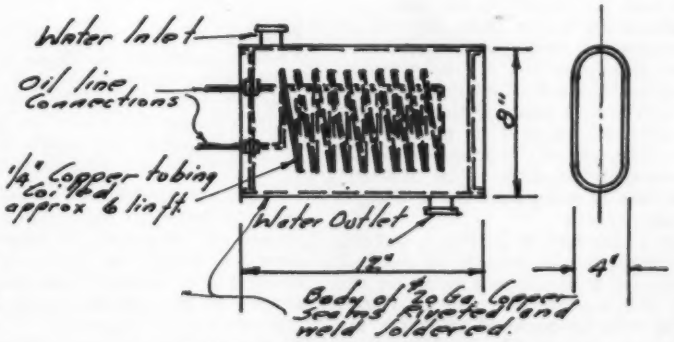
BY dint of persistent advertising and education, the motoring public (both land and sea categories) have become acquainted with the oil film needed around every moving part to prevent friction and wear. The resulting passably keen interest in lubrication has made both motor cars and boats run farther and better.

The present is an opportune time to exploit the heat film in a correspondingly forceful manner. Engineers have given us thermostats, improved water pumps and pump drives, larger water jackets, larger direct tubing and manifolds, expanding jacket cover plates, leak-proof packing, gaskets, and drain-cocks, and minor safety and efficiency details in the cooling system. But they have also given us increased heating risks in higher speed motors with high-compression heads and colored gasoline nearly as aromatic as the steam cars of twenty years ago. Besides, modern marine motors are often braced with 2½ inch main bearings to the maximum possible number for the crankshaft. Oil is frequently pumped through drilled crankshafts and runs a gauntlet of filters, screens, check valves, and by-passes.

Such factors have bolstered performance, but at the expense of complication and risk of occasional serious disorders. That is where the heat film comes in. Every motor has a normal or best point heat range, generally between 160 and 190 degrees inside water jackets for marine work. Some motors reach that heat quickly; others require half-an-hour or longer. Some need the spark retarded until they attain such heats; others must have special regulation of carbureter air valve or choke. Even motors of the same make and model often vary considerably in the trying warming-up period. Aluminum pistons with steel or invar struts have found favor with many engineers. They are fit nearly as closely as cast iron ones, but, being inevitably more susceptible to temperature changes, the heat film around them should be guarded by gradual warming up and immediate reduction of load or stopping when temperatures of 200 or higher are approached. When cruising, the marine motor is expected to stay cool on any kind of water available. Use of four or even five piston rings per cylinder to increase speed and power and lessen chance of oil pumping makes the engine more liable to score or carbonize if running temperatures are abnormally high or low.

Even a novice can see the ravages of overheating or underheating after they have done their work, but a thermometer is the only means to detect them in time to avoid the damage.

(*Continued on page 86*)



A simple sketch for a satisfactory oil cooler suitable for engines of moderate size

Keeping the Top Sides Clean

Problem Involves Prevention Rather Than Cure and Can Be Overcome by Adopting Some of the Suggestions Made by Readers

Answers to the Following Question Published in the May Issue

What methods have you found practical for preventing dirt from streaking from the deck over the white topsides every time it rains?

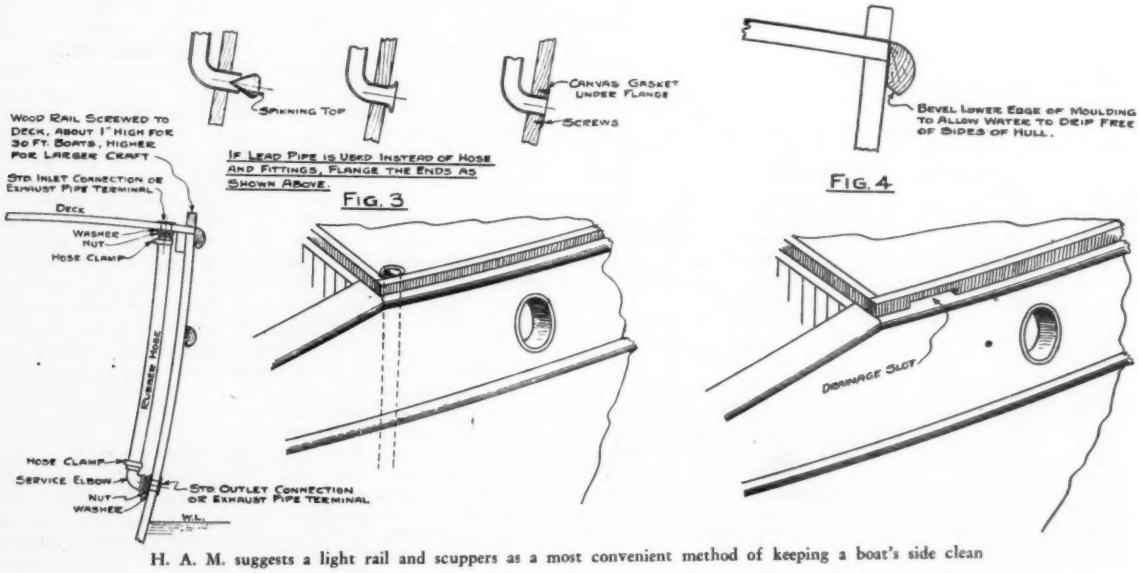
Keeping the Boat Clean

(The Prize-Winning Answer)

THE streaking of the white paint on a hull greatly detracts from the boat's appearance. To overcome or minimize this trouble, either one of the two schemes suggested in the accompanying drawing may be employed. In Fig. 1, a wood guard rail is attached to the entire outer edge of the deck, laid in thick white lead and fastened with galvanized or brass screws.

Fig. 4 shows the deck mouldings beveled at the bottom to permit the water to drip free of the hull. This scheme may be used in addition to the rails already described and will take care of the slight amount of rain and dew that falls upon the mouldings.

There is a slight amount of water which necessarily cannot be kept off the topsides due to wind and the rocking of the boat; however, most of the streaking, which occurs while the boat is motionless, will be eliminated. H. A. M., Philadelphia, Pa.



H. A. M. suggests a light rail and scuppers as a most convenient method of keeping a boat's side clean

At the lowest point of the deck, provide scuppers and a hose, or pipe to conduct the water to an outlet located about 6 inches above the water line. Instead of hose and fittings for conductors, lead pipe may be used with the ends flanged as shown in Fig. 3. An ordinary spinning top, preferably one of hard wood may be used for spreading the ends of the lead pipe. Provide canvas gaskets under flanges or washers, laid in thick white lead to insure tightness. The size of the scuppers should be determined by the area of the deck to be drained; however, 1¼ inch diameter is suggested for a 30-foot boat and larger for longer craft.

In Fig. 2 guard rails are employed as in Fig. 1, but the water is allowed to drain down the outside of the hull through a slot cut in the rail at the lowest point on the deck. This method is not as effective as the Fig. 1 scheme but discoloration will be confined to where the overflow takes place, which can readily be kept clean by an occasional scrubbing.

Covering Board Stops Streaking

KEEPING the sides of the boat clean is quite a problem, especially for those who moor their boat in the large cities where soot soon covers the deck to be streaked down the white topsides by the first dew or rain. Two or three scrubbings and the gloss has gone from the paint as any satisfactory cleaner strong enough to remove the dirt also destroys the gloss on the paint.

There are two means of preventing this: first, with a covering board or narrow toe rail; second, with a drip groove in the guard. If your boat is beyond the construction stage, the first mentioned is the practical method as it would be extremely difficult to run a drip groove on the guard after it is on the boat. The first sketch shows a drip strip or toe rail as it would apply to the average cruiser. The size shown can be varied to suit conditions. The under side should be hollowed

slightly to allow the outer edges to bear on the deck and prevent water lodging under the strip. Lay it in thick paint and fasten with screws about eight inches apart. If your deck is rather full you may have to steam and bend the strip to shape before fastening to the deck. A lead scupper placed at the low point in the shear and running down below the copper paint line will carry off the water. On a raised deck cruiser it is quite practical to end the strip at the aft end of the deck and allow the water to run off the side at this point. This reduces the nuisance about 90 per cent. as the remainder of the sides can be easily reached from the cockpit. It also eliminates the scupper which, of necessity crooked, is apt to plug up. The covering board and toe rail have other advantages, preventing the water from lodging between the guard and the side of the boat, also offering a certain amount of protection from sliding off the deck in heavy weather.

The second sketch shows the drip groove. If the boat is under construction it is probably the neatest way out. The guard, however, must be heavy enough and properly shaped to take the drip groove and, of course, if the wind happens to blow just right some of the water is sure to run down the side. The groove is best run on a shaper in the boat shop although the amateur can with a combination plane fitted with a guide run it himself. It should be from a quarter to three-eighths of an inch wide and about that deep, depending, of course, on the size of the guard.

The third sketch shows a toe rail on top of the covering board which under certain conditions may be desirable although it will be noted that boats with covering boards have little trouble with dirty sides. The wide covering board has this disadvantage, in that water lodging under is apt to rot it, the canvas, and the deck under it.

E. G. M., Seattle, Wash.

Streaking Prevention

MOST boatmen like to keep a good looking boat and are willing to do the work necessary but sometimes this work is so much that every idea that will reduce this work is adopted readily. It is the inside that concerns the boat owner generally above everything else, yet it is the outside that creates the impression in the mind of the outsiders who may never know how well the inside is being cared for if the outside looks dirty.

Of course, this streaking cannot be entirely prevented due to the rocking of the boat, splashing and spray and other causes, but it can be lessened. After a rain the dust will settle upon the wet surface be it the deck or the sides and dry there in spots. Then the next rain or a heavy fog or dew will soften some of this and it will trickle down the sides leaving a dirt streak because the flow is not fast enough to wash off the surface.

It seems odd that there should be so much dust on the water and on rivers this amounts to quite a lot, especially if there is a railroad running along the river. The scientists even tell us that the earth is continually passing through a cloud of meteoric dust and this may account for the dust that accumulates on board a ship in the middle of the ocean.

One aid is to see that the paint used is of the hard-surface kind and not porous as so many are. A smooth hard surface will be easier to clean and stay cleaner for a longer time. It is fine to have a pump and hose to wash off the deck frequently and to use when scrubbing the sides. A power pumping outfit is so handy that you do the job more frequently than with the old style rope and bucket method. A change in the color to a light tint is often helpful in reducing the labor of keeping it looking clean.

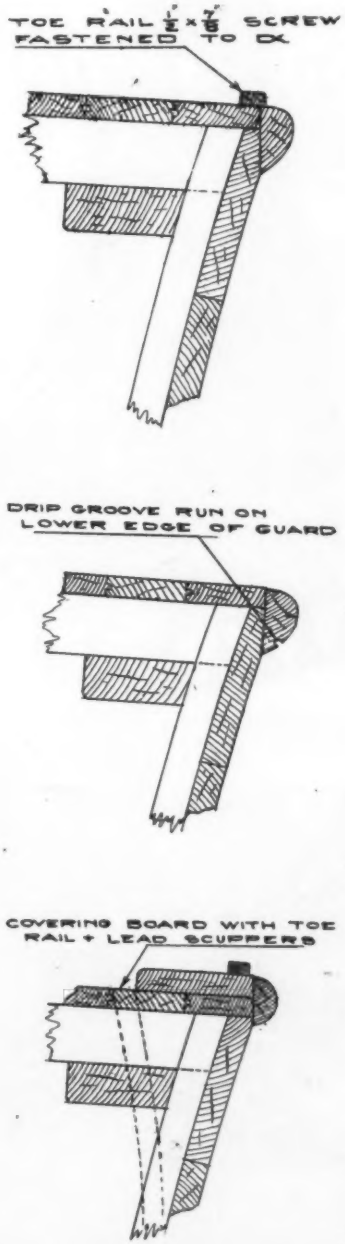
The streaking which occurs is not so much the result of a heavy downpour which quickly wets and washes the deck but rather the slow trickle of dew which leaves the dust.

Another thing is to place a wood curbing around the edge of the decking, standing up far enough to prevent any ordinary rainfall washing over it. At several points this curbing is to be omitted to form outlets and at these places the flow will be greater and the dirt will be washed down faster and at the same time it will concentrate the streaks at points that will require little time if they are frequently rubbed down. The rest of the sides need not be gone over each time and much work is saved. On some decks it is possible to have the curbing continuous and to use scuppers at the proper drainage points, the outlet of the scupper being well down near the waterline.

Another aid is to cut a groove in the underside of the half-round molding that is usually on the top of the sides where the canvas is nailed, forming the finish strip. The groove can be cut with one of the small round nose planes used for grooving with about a ¼-inch width of blade. Lay this plane flat against the planking and cut the groove on the underside of the molding where it comes in contact with the planking. The water washes around this molding but must drop off and if the boat is not rolling it will fall clear of the boat. This groove will not show nor will it weaken the molding if properly made and with the plane described it is easily made. If there are other half-round or V shaped moldings part way down the side, they are to be grooved likewise for the dirt also accumulates on the upper part of these moldings and helps to form streaks as well as the dirt on the deck.

One handy tool to assist in the work of scrubbing the sides is made by attaching a common scrub brush T shaped to the end of a stick so that you can reach down the sides without much bending. Of course, the dink is the best place to get when cleaning the sides but a tool such as this makes it easy to give the quick clean-up when streaks show at any point before the regular general clean-up period.

L. R. K., Philadelphia, Pa.



E. G. M. shows in several detailed drawings, proper methods of construction to prevent streaking

YARD *and* SHOP

Notes of Interest to Both Owner and Manufacturer

G. H. Koven Dies

GUSTAV H. KOVEN, well-known Jersey City manufacturer of sheet metal products, importer and exporter and civic worker, died in New York Hospital following an intestinal operation on June 12th. Mr. Koven, who lived in Jersey City where his big manufacturing plant was located, was 55 years of age. Mr. Koven was president of the firm of L. O. Koven & Brother, Inc., and in addition served as president of the International Overseas Corporation, vice-president of the Hoboken Home Savings Bank, a director of the Trust Company of New Jersey as well as serving as officer in several other corporations. He was also vice-president of the Jersey City Chamber of Commerce and a director of the Jersey City Young Men's Christian Association and a director of the Boy Scout Council. His sincere interest in all the corporations and civic offices made his counsel most valuable and his passing will leave a gap which it will be difficult to fill.

Foreign-Built Pleasure Boats Now Subject to 30 per Cent Duty

Until but recently the yacht building industry in the United States was almost totally without tariff protection of any description and the law was such that any foreign-built pleasure boat or yacht of any size could enter the country duty free if it sailed in on its own bottom. Yachts so entering were subject merely to a small user's tax of so much per foot of length. The natural result was that the big vessels ran over from Europe under their power and entered for almost nothing and the smaller craft after being carried to Canadian ports in cargo ships were dropped over the side and run across to the American shore. The disastrous effect of this practice on our American shipyards is obvious, especially when it is recalled that yachts can be built on the other side for about two-thirds of what it costs here.

The Detroit News International Trophy is truly nautical. It has been hand carved from a single piece of ship's oak

But now with the signing of the Revenue Act of 1928 by President Coolidge on Tuesday, May 29th, the futile users' tax on foreign built pleasure boats was repealed and in its stead Congress has adopted the following paragraph:

Section 708. Definition of the term Motor Boat. The term motor boat, when used in the act of September 21, 1922, includes a yacht or pleasure boat, regardless of length or tonnage, whether sail, steam, or motor propelled, owned by a resident of the United States or brought into the United States for sale or charter to a resident thereof, whether or not such yacht or boat is brought into the United States under its own power, but does not include a yacht or boat used or intended to be used in trade or commerce, nor a yacht or boat built or for the building of which a contract was entered into prior to December 1, 1927.

Heretofore, the Treasury Department, in its interpretation of the Tariff Act of 1922, has seen fit to levy a duty only upon the smaller motor boats, usually brought into this country as part of the cargo of steamships from foreign shores. The above

(*Continued on page* 46)

South America is doing things in the American style. Roberto E. Trillia in Buenos Aires displays a Dodge runabout, and other typically American craft, outboard engines, etc., to the South American yachtsmen

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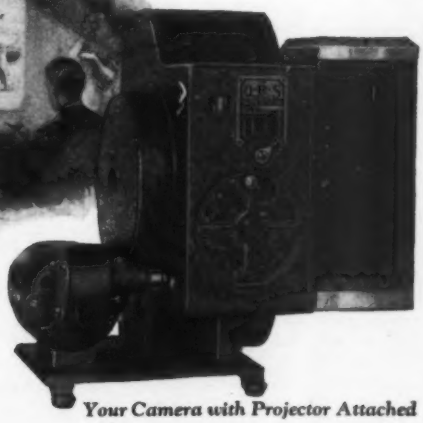

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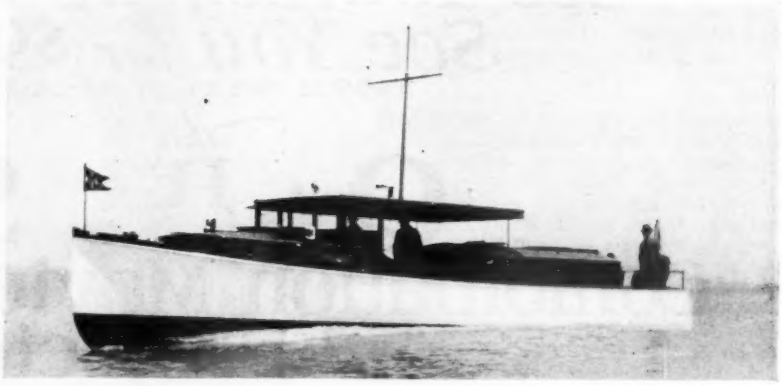
(*Continued from page* 44)

quoted paragraph, however, with the repeal of the small users' tax which had been imposed for several years past, now gives the boat building industry in the United States the first real legislative protection that it has been able to secure. Congress has spoken, and the Treasury Department is now authorized by this definition to collect a duty of 30 per cent on all pleasure boats imported for sale or charter after December 1, 1927. The boat building industry in the United States has at last received, by Congressional action, the recognition that it has been seeking for many years past.

The effect of this Congressional definition should be to place the boat building industry of this country on the firmest basis that it has ever enjoyed.



A large double cabin Matthews 46-foot cruiser with an open deck house in the service of the Bureau of Fisheries, Department of Commerce. This boat made over 18 miles on trial runs

A Compass for Speed Boats

In speed boat installations compasses must be of special design and construction to stand up under the operating conditions peculiar to this type of craft. The compass must be built to withstand the vibration, quick movements and shocks encountered in speed boats or fast cruisers. To fill the need for a compass for fast marine work the Pioneer Instrument Co. of New York has adapted for boat use their aviation magnetic compass. The compass has both a vertical and horizontal card. It can be had with radium illumination and is supplied in three types of mounting—on instrument board, flush in instrument board or flat on deck. The instrument is very accurate and can be depended upon to return to mark, after a quick change in course, within 30 seconds. The compass was originally designed for aeroplane work and was used in Lindberg's plane to Paris, Byrd's to the pole, and in the plane used by Brock and Schlee in their flight to Japan.

Radiobeacons Installed on Long Island Sound

The first installation of radio navigation aids for inside coast traffic was made recently with the placing of beacons at Execution Rocks and Little Gull Island Lighthouses, near the two extremities of Long Island Sound. Radio beacons are now in operation at Stratford Shoal, the two locations just mentioned, and at Vineyard Sound Lightship. With the signal at Boston Lightship this provides five radio aids on the inside route to Boston.

The beacons noted all have distinctive characteristics so that they may be readily identified and constitute a most valuable aid to cruising yachtsmen or commercial vessels running up the Sound. The installation is well justified in view of the heavy traffic through this waterway and the fogs and other weather conditions contributing to the hazards of the route. All stations are operated at regular intervals during clear weather and

(*Continued on page* 73)

Fairchild Photograph

Aerial photograph of the Elco Boat Works at Bayonne, N. J., where a million dollars' worth of standardized cruisers, ranging in length from twenty-six to sixty-two feet, are being built

The Amateur Boat Builder

(*Continued from page 39*)

rail and the stem head should have a neat finish above it; then in addition allow three or four inches for nailing braces when setting up the frame.

STERN. If the boat to be built is a double ender with a canoe type stern, the work of developing the stern frame, rabbet, etc., will be in general as described for the stem. Short lengths of the water lines are drawn in the half breadth plan to obtain the bearding and rabbet lines and extra sections are drawn if necessary to give additional points in the lower part, where water lines are of little value. The various members are arranged to suit the conditions imposed by strength requirements and available material, and drawn in. However, the transom type stern is the most popular type today, and is the type illustrated, so we will next consider how to go about obtaining its size and shape.

EXPANDING THE TRANSOM. See Fig. 7. On the body plan illustrating this article is shown, by a dotted line, the projected form of transom; that is the form as seen from directly aft. Fig. 1. As this transom has a rake and is curved in plan view, it is evident that the true form is somewhat larger than shown, and this expanded or true form must be obtained. If the transom was straight across the boat and had no rake, definite offsets could have been given for it and the loftsman saved the work of expanding it. Even for a curved transom such as shown some designers give expanded dimensions but I doubt if this is of any assistance to the amateur builder as he spends about as much time finding the proper endings for the lines, when fairing the boat, as he would expanding the transom himself. Moreover, the loft work is full size and starts with faired lines so must be more accurate.

Refer now to the figure. To avoid confusion the profile and plan views are shown separate. Dotted lines simply connect corresponding points in the two plans and show how they are squared from one to the other. It is not necessary to draw them at all, in fact, the practical way is to lift the spots from some fixed line in one plan, on a rod or strip of paper, and transfer them to the other.

Let the line *AB*, representing the rake or transom in the profile, be also the center line for the expanded transom. From the points a_1, b_1, c_1 where this line intersects the water lines, square down to the center line of the half breadth plan. Starting at each point thus obtained draw an arc of a circle, using the radius given on the line drawing. They are numbered 1, 2, 3, 4, same as the water lines. Also draw an arc starting at the after perpendicular which is the deck line, *D*, if the crown of deck is disregarded. Note that each arc has the same radius so the center must be changed for each one. These arcs are drawn with large trammels or lacking this instrument use a stick with a nail driven through it near one end, and a pencil held against the other end, which answers the purpose just as well.

We have already drawn short lengths of the water lines, when fairing the boat, and where each arc intersects the corresponding water line and deck line (*a, b, c, d*) is a point in a line showing the contour of the transom in plan view. These same points squared up to the water lines in the profile, give points in the line there. It is not necessary to draw either of these lines but it helps to identify the various points.

Starting at points *a, b, c* and *d* in the profile draw lines aa_2, bb_2, cc_2 and dd_2 square to the center line AB. Bend a batten around each arc in the plan and lift the distance from the center line to the intersection of the corresponding water line, (*points abc*) *also the deck* d and set these off on the proper lines which gives points a_2, b_2, c_2 and d_2 in the expanded transom.

Next bend a batten around any arc and lift the points where the buttocks intersect it. Set these off square from the center line of the expansion and draw the lines *e, f* and *g* parallel to the center. Due to the curve of transom these buttocks will have a little greater spacing than in the other plans.

From the half breadth plan, square up to any water line in the profile, the points where each buttock intersects the arc corresponding to that water line. To avoid confusion dotted lines showing this operation are omitted. Through these spots draw the lines c_3, f_3 and g_3 parallel to rake of transom. The points where these lines intersect the buttocks, already drawn in the profile, squared over to the buttocks in the expansion gives points *h, i* and *j* in the expanded curve of transom. Note that in the drawing the buttocks are shown in dot and dash lines in each view which will assist to make matters clear.

We now have a series of spots through which the expanded form of transom can be drawn. There may be some doubt between points a_2 and b_2 as it is a rather critical part of the curve. In a case of this kind draw an extra water line in the body plan between 2 and 3. Lift three or four half breadths, transfer to half breadth plan; draw a short length and proceed as described for the other water lines.

Mark the camber, or crown, of deck on line *AB* and draw the line, which is an arc of a circle. Note that the height on the line *AB* is the actual crown of the deck at the stern, above the point *d*. This finishes the expansion.

It is intended that the transom be bent to an arc of a circle, because of simplicity, which will no doubt cause some shark on geometry to complain that this expansion is not accurate. True—but as the rake of transom is small and the radius comparatively large the errors are too small to make any practical difference. However, for a stern having considerable rake, either the water lines in the plan would have to be eliptical or the transom bent to a modified curve which would be developed from the plan and profile. As this condition is seldom met with in motor boats I will not go into it here.

TEMPLATES. We now have outlines, showing the shape in profile, of all parts forming the backbone of the boat and the next job is to make templates or patterns to these lines, so that the material for stem, keel, knees, etc., may be lined out. These patterns not only give the proper shape but they are readily moved about on the material to be used, so that it may be cut to advantage, avoiding knots, checks and other imperfections and utilizing any favorable crook in the grain, also the amateur can take them to a mill and have the material roughed out, thus saving himself considerable hard labor.

The best way is to make every part of pine about ¼ or 5-16 inches thick, fitting each carefully to the lines and adjoining parts, so that the complete structure is represented in template wood lightly tacked in place in the floor.

There are several ways of going about it, depending on the size and character of the part. Let us take the stem first. This is a simple template and can readily be made in one piece. A very quick and easy way to transfer the lines from the floor to the template wood is with tacks or, better still, thin headed wire nails such as are used for boxes. These are laid on the floor with their heads to the line, spacing them eight or ten inches in the upper part where the curve is slight and closer around the fore foot where it is greater. Where there is a straight line one tack at each end is sufficient.

The template material is laid carefully on these nails and given firm pressure to imbed the heads in it. A line is then drawn through the indentations with a button or straight edge, and the template sawed out. Now plane it fair and to fit the lines perfectly, especially the forward edge. Tack it in place and mark across it all the water lines, deck line, and plumb lines at No. 1 and No. 1½ sections. Also transfer spots for the rabbet line which will be drawn later.

If as previously suggested heavy paper has been tacked to the floor in way of the stem it is only necessary to cut it out with a knife and we have a template with all required markings on it.

The keel template is usually fairly wide at the after end and it is necessary to build it of several pieces arranged to best suit the conditions. Generally the forward part can be in one width; the after part of separate strips about 2 inches wide, top and bottom, connected with a few braces of the same material. It is really less work to make it of two strips as only one edge of each need be planed and fitted to a line. If the keel is long and straight it is not absolutely necessary to make a complete template but patterns should be made for the ends where it joins other parts.

In assembling templates made of more than one piece, the joints are butted, not lapped, and secured with butt blocks or cleats on top, so that the under side of the completed template is flush in one plane. The butt blocks should be of ample size and well fastened which is best done with iron clout nails or copper tacks about ⅛ inch longer than the combined thickness of wood. They are all driven nearly through, then a piece of sheet iron is slipped under which will clinch the nails when driven home. Screws may be used if desired.

In transferring long curved lines, such as the top of keel, nails may be used as described for the stem but a better way is with a *spider batten*. Fig. 8. This is an ordinary fairing batten, of proper size, to which sticks about 15 inches long are attached at intervals of 12 to 18 inches. To use it one end of the batten is secured to prevent movement endwise, then adjusted to the line to be transferred and held in place with nails tacked in the free ends of the legs. The batten may then be lifted a little, the template material slipped under and lined out.

The shaft log, deadwood, etc., are comparatively simple, being mostly straight lines. When all are fitted and tacked in place on the floor the various reference markings are put on, i. e., sections or mould stations with their numbers, frame stations, center of shaft, center line of rudder stock and the rabbet line.

(*Continued on page 78*)

Real Runabout Luxury ~at Low Cost!

EIGHTEEN surging horsepower — eager, dependable, silky smooth. Driving big capable hulls at speeds that only an out-and-out racer can beat. Room for cargoes of passengers in deep-seated, loungy comfort. *Real express runabouts,* endowed with thrills, competence and all-'round motor boat satisfaction—at a cost that makes the check-book chuckle!

Dozens of foremost shops are building such hulls! And *Quads* are powering them! Thousands who "could never see" an outboard motor before have thus joined the most clamorous of *Quad* enthusiasts. And thousands of veteran outboard users have found the "outfit" they knew would come some day.

Swiftly, inevitably, the *Quad* has won its dominant place. The reason is plain. It gives a type of performance not available in any other outboard motor — at a cost far lower than any inboard installation equal in power, smoothness, performance.

The Super Elto catalog fully describes the *Quad,* the fast middleweight *Speedster,* the popular *Service Twin.* Included is a Directory of Boats and Builders. Mail the coupon. ELTO OUTBOARD MOTOR COMPANY, Ole Evinrude, *President,* Mason Street, Dept. F, Milwaukee.

The Super Elto Quad

The only 4-cylinder outboard motor. Entirely vibrationless at every speed. Starts with a 2-inch flip of the fly wheel. Dual ignition and dual carburetion give double dependability. Instant reversing, simple to operate and maneuver. Speeds of 35 miles and up on light racing planes. Sturdily built for every heavy duty service. Develops 18 horsepower, weighs 92 pounds. Price, $275.00.

$1,000.00 Purse for Highest Quad Speed

Elto Outboard Motor Company offers a $1,000.00 purse for the best Quad record in miles-per-hour made in competition at any official race up to October 1st, 1928. For the second best record, a purse of $500.00. For Speedster owners, a purse of $500.00 is offered for the best speed achieved under the above conditions. For the second best Speedster record, a purse of $250.00. Records must be approved by the judge of Outboard Records. Detailed information on request.

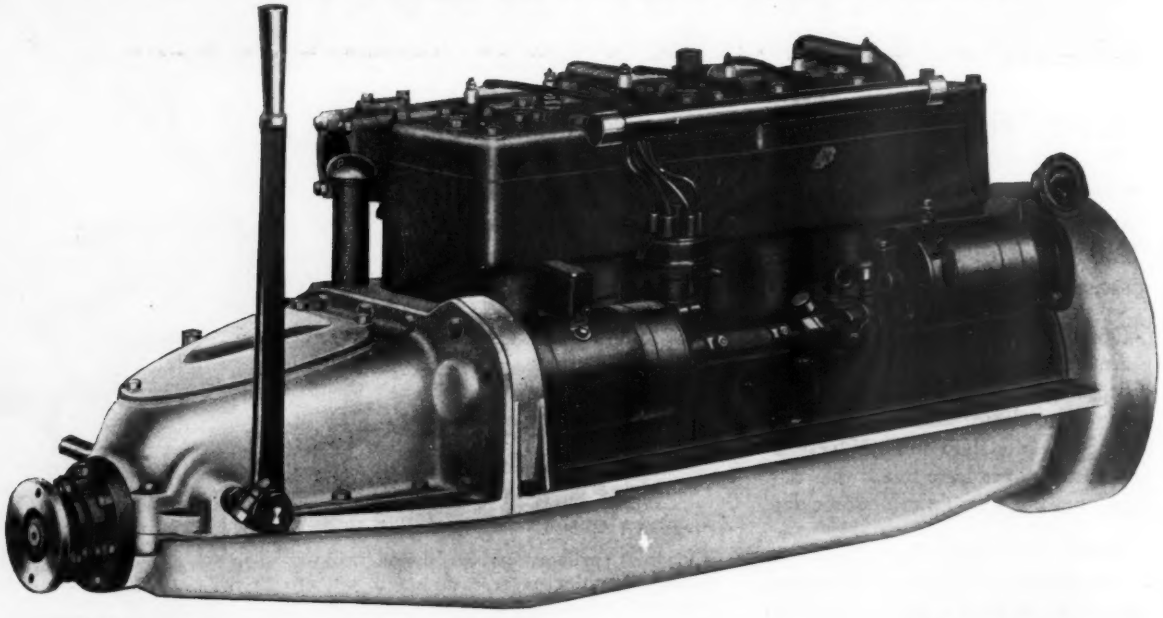
THE QUAD ON THE FAYBOW "MIDDY"

ELTO OUTBOARD MOTOR COMPANY
Mason Street, Department F
Milwaukee, Wis.
Send me the Super Elto Catalog and the Boat Directory.

Name.....

Address.....

See this Great Motor in Action-Talk with Any Owner Get the Facts-First Hand



GRAY "SIX-40"

BUILT BY PIONEERS—ENGINEERS—LEADERS

A Powerful Six packed with Power that leaps as the throttle opens—one that is amazingly free from vibration. Adopted as standard power equipment by the four largest of America's Builders of Stock Cruisers up to 30 ft. in length.

Designed and built to embody all the latest features of proven value—

—Shortest, lightest, lowest (above center of shaft), sturdiest "Six" in its power class.
—Big crankshaft, big bearings, long pistons.
—Lowest center of gravity.
—Pressure lubrication; no oil leaks anywhere.
—Handy oil filler—big hand hole plates.
—Accessible valve adjustments behind oil-tight plates.
—Silent adjustable Morse timing chain.
—Submerged pressure oil pump.
—Great flexibility of power—variable range, 185 to 3000 R.P.M.

Price with Aluminum Base $595—with Iron Base $575

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Gray Also Makes

other Motors for all Marine requirements, from 5 to 115 H.P. Write for Free Catalog showing the complete Gray line of Singles, Twos, Fours, Sixes and Eights

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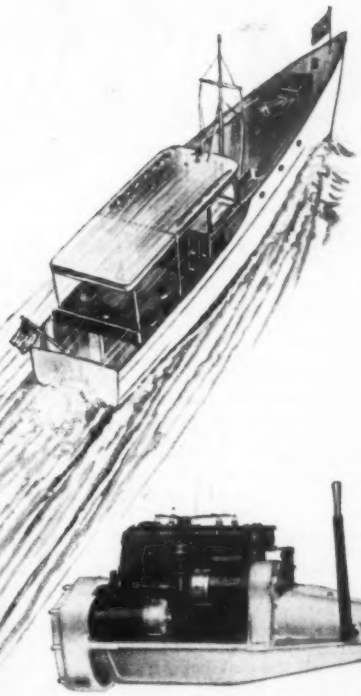
Advertising Index will be found on 3rd last page

"Speed that Meets the Marine Mood of Today"

GRAY
ENGINES
for the Higher Speeds



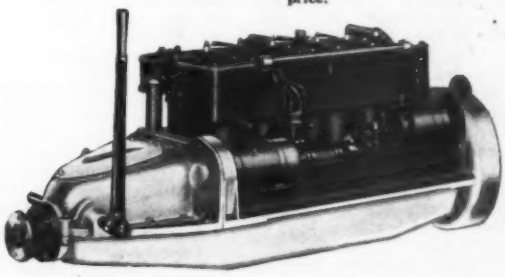
GRAY has a glorious past in the marine power field—but does not live in it. Each year sees Gray Engineers pushing ahead with engines that meet the newest trend in boat designs. Today's call is for *speed*—and lots of it. The new Gray "Fours," "Sixes" and "Eights" offer builders and buyers power equipment to insure the utmost in speed and performance with all of the dependability for which Gray Motors have been world-famous "since 1906."

"FOUR 30"

A high compression "Four" of unusual speed, smoothness and power. 4 cycle, 3⅜" bore, 4½" stroke. Over-all length, 42". Crankshaft, 1⅝" diameter, drilled for pressure lubrication. Develops 53 H.P. at 2,400 R.P.M., 30 H.P. at 1,200 R.P.M., for continuous operation. Price, $445.

New High Speed type just developed. Write for full particulars. No change in price.

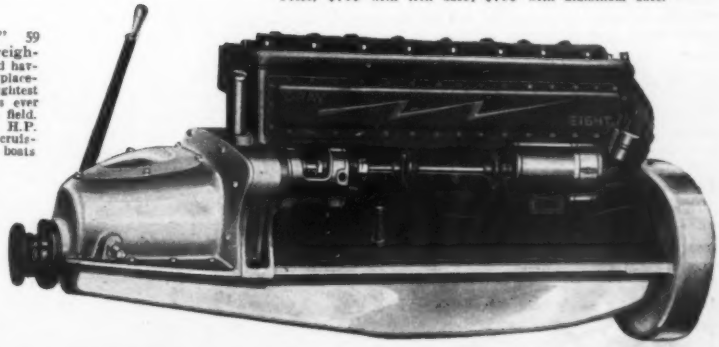
"SIX 72"



Six cylinders; bore, 3⅜"; stroke, 4⅝". Length over all, 50⅝". Only 16½" to top of plugs. Seven-bearing, counterbalanced crankshaft, 2⅜" in diameter. Deep water jackets. Thick cylinder walls. Outside, accessible, removable oil pump. Price, $765 with iron base; $795 with aluminum base.

"EIGHT 115"

A "Straight Eight," 59 inches over all, and weighing under 900 pounds, and having 322 cubic inches displacement; the smallest and lightest "Straight Eight" that has ever been put into the marine field. Develops well over 115 H.P. Especially suited to fast cruisers, runabouts, smart ferry boats and fast marketing service. Price, with complete motor equipment, A.C. fuel pumps, oil cooler and aluminum base, $1,100.



Write for complete catalog of "Fours," "Sixes" or "Eights." State which is wanted.

GRAY MARINE MOTOR CO.

680 CANTON AVENUE
DETROIT, MICH., U. S. A.

Wee Yot Makes a Cruise

(*Continued from page 28*)

hook, and Wee Yot rode like the proverbial limousine. A night of unmolested repose for Robinson Chusoe and his shipmate Friday.

Powell River, by the way, is not far from Cape Mudge, Seymour Narrows, where the ill-fated liner Northwestern, of the Alaska S. S. Lines, was wrecked on a reef in December.

Morning they paid the harbor master a 50 cent tax for which they received a receipt, the paper on which it was printed being worth 49½ cents.

"Friday, July 29th, 1927. 10.25 a. m. Cleared from Powell river and proceeded northward. 11.15, Atevido Reef abeam; 12.15, arrived at Lund, had luncheon. 3.31, Junction Point abeam, strong head winds with a choppy sea. 5.00, Bullock Point abeam Propeller shaft broke. Hoisted sail, installed jury rudder, turned about and proceeded to Regeal Point with Refuge Cove an ultimate destination. A blacksmith turned out a new shaft from hardened metal and all was well." That's how a leaf from the log of the goodship Wee Yot reads.

At Lund they met the yacht Rendezvous, and found that she was an Episcopal Missionary boat that was a real saviour among the isolated British Columbia coast people. The missionary in charge of the ship had served that country for over three decades. He healed the ill, married the ambitious, was on hand for new arrivals to this great world, and preached the services when a person had embarked on life's last voyage. He was a very fine type of man and incidentally a very interesting talker.

Early dawn, July 30th, they rowed across Lewis Channel to Squirrel Cove. There, at Chipmunk, no, I mean Squirrel Inlet, they met Martin Christenson, a real sailorman of the old school. Mr. C. sailed the briny deep when the snowy white of the clipper marine just began to whiten the blue of the seven seas. Sun bronzed, hardened, honest as an angel, he had tales to tell and relics to show from all corners of the two hemispheres. M. C. was willing—yes, willing to give his shirt to an honest man. Garbed in all the makings of a real salt, faded blue dungarees, mate's cap, and symbolic corncob pipe, Martin was the replica of the typical sailorman. He has planted his sea boots in the Arctic and the Antarctic, he has been shipwrecked, on the beach, and in some of the wildest hurricanes that wind e'er did blow. Despite his calling there was a distinct note of refinement and culture about this man. He had probably assimilated his capable vocabulary from hobnobbing with men from Ship Street in Hongkong or hoboes in Sydney's grog shops. With a fox terrier and a cub bear for business associates Martin explored the coastline of B. C. eking out an honest but primitive livelihood from his fishing operations.

Not long after they had left their newly made friend, Jake Finstead rowed to town. Whether you swallow it or not Jake had had his morning workout. Living up the creek aways he had rowed twenty miles to town and had ten more to row to see a friend. Jake liked the long oars but he said he was seriously considering getting one of those putt putts from *Chycogo* as he called the windy city. More power to Jake, any man that rows thirty or forty miles for a day's workout is a true follower of the great, blue sea. That American movie, Swim Girl, Swim, was good but Row boy, row, will be a screen masterpiece that will rock the nation.

(*Editor's Note*: Although the two characters described herewith are real, nom de plumes have been used for obvious reasons.)

Even though the profound beauty of the British Columbia country did leave a never to be forgotten impression with the Buceys, the striking courtesy and kindness of those coast people was even more pronounced. They were not only courteous, they were kind and friendly, willing to go out of their way to do a man a kind deed.

July 31st, they cleared for the run through Lewis channel. Near Teakerne Arm they met a Mr. Bell. He was formerly the owner of a large engraving concern in Vancouver but had retired. His interests in life consisted of a yacht, a beautiful country home, the fish in the streams and the game in the forests. Dining with Mr. Bell they later had a delightful dip in the cool water. A friendly black bear wended its way from the hills and wandered down to Bell's front yard. Attempts to shoot the monster with a camera as he lumbered for the security of the tall timber failed.

Bidding their newly made friend adieu, they dusted down Lewis channel with all sails set and all hands in jubilant spirits. Churchhouse, an old Catholic mission, that once blossomed like an aristocratic trading center, was soon abeam. Many aged Indians lived in the settlement, the younger generation of redskins being away in Alaskan waters for the fishing season. With the idea in mind of securing several Indian baskets, they inspected the stock of the respective squaws. The natives were too shrewd business women, probably having received their training from some practical American merchant. They wanted about ten times what a basket was actually worth, so no deals were consummated there.

Washday was held in Redonda Bay. Boyd tried something new, a tapioca pudding with a new patent. It tasted more like Chinese pudding than tapioca pudding. Resolved, therefore, that Boyd's future is not along the lines of a chef. But back to washday at Redonda. A three gallon bucket was the boiler, a long oar the washing machine, and two strong arms the power. With the brains and ingenuity back of that equipment they should have put out the shingle and incorporated a Chinese hand laundry.

Yucletaw rapids, North of Redonda Bay, was the termination of the grand cruise. Without a doubt Yucletaw rapids is one of the prettiest spots along the B. C. boundary. It is treacherous and requires skill to negotiate even with a large cruiser. They let well enough alone and didn't endeavor to go through, but contented their wishes with a view of the foaming channel.

With an early start as dawn broke, a day of uneventful running saw them in Powell river once more. Their friend, the ambitious harbor master, was on the job. He explained to them that dues must be paid going and coming, so they had a second receipt to show for their four bit piece. A fair exchange is no robbery!

Gigantic seas smashed into Wee Yot as she ploughed through Malspina Straits. So intense was the wind they ran into Jervis Inlet, the ship rolling and pitching violently as she crossed the bar. Perhaps Mr. Bucey reflected that his last will and testament might come in handy after all. They hove to in Thunder Bay, as the storm showed no immediate intention of abating.

Before eight bells and noon the following day they had blazed a trail of blue, their vessel riding safely in Secret Cove harbor. The water was clear and crystal like, while with evening, the setting sun tinted it crimson and gold, casting fleeting shadows on the mirrored sea.

Daybreak again! The daily dozen over with, a few lungfulls of fresh air, a delicious breakfast and under headway. The natives of Swechelt proved more moderate with their prices on Indian relics. Consequently those good warriors took the white man's shilliing.

With a flock of Indians, men, women and little children on hand to bid them a safe journey to Puget Sound, Wee Yot headed for sea. It was a peppy, uneventful run to Bowen Island, on Howe Sound. Words fail to describe Howe Sound, Jervis Inlet and those havens of the western seas. Owing to its proximity to Vancouver, Bowen Island is popular as a summer rescort. Along in the evening there were at least fifty vessels there of all types—sailing ships, power cruisers, palatial yachts and outboard motored skiffs.

The Buceys honored Bowen Island by having their Sunday dinner at one of the resorts. Reluctantly Wee Yot was pointed for Vancouver, metropolis of Western Canada. Anchoring her at the clubhouse of the Vancouver rowing club, Vancouver had two distinguished guests from Seattle.

Blaine, the home of 18th amendment, Captain Volstead and poor moonshine, came next on the route. They either jettisoned or drank the Scotch which they had for (strictly medicinal?) purposes. Whether they jettisoned that liquor or sampled it is mostly a matter of conjecture. Anyway they disposed of the stuff. For the sake of the record, a long entry was made showing it was jettisoned,—which lawyers call a self serving declaration.

Between nets, fishing boats, and dories they ploughed down the Straits of Georgia, rounding Point Roberts with all sails set. At Blaine the custom's man didn't seem much interested so they regretted throwing overboard the supplies. He didn't inspect the craft but merely took their word for it that all was ship shape in the foc's'cle of Wee Yot.

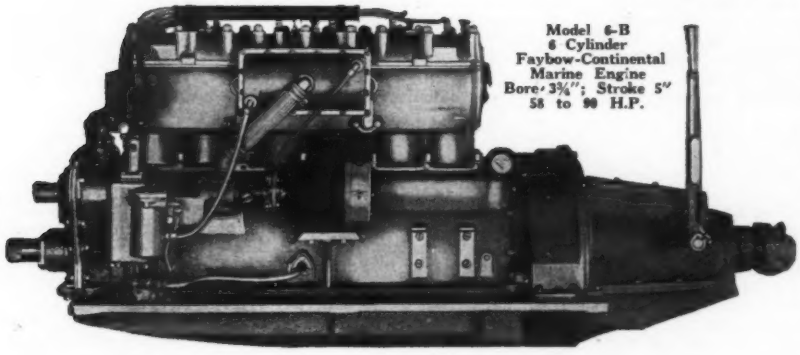
Several hours out of Blaine, Anacortes, on Fidalgo Island, was abeam. It's a nice little town with a mediocre harbor. In order to save the long run around Fidalgo Island, they decided to go through Swinomish Slough and the Hole in the Wall, at LaConner. Shallow water proved a menace but due to their low draft they chugged through Swinomish Ditch. Several times they were compelled to remove their masts for low bridges that didn't run on wheels.

LaConner is a funny little town on the banks of Swinomish slough. Every man and his brother has a one lunged fishing smack and a set net. Salmon are big, juicy and numerous in that section of the Puget Sound country. Wee Yot made the Hole in the Wall easily. Like a switchback in a mountain road, the pass is very deceiving to the careless mariner.

Uneventful was the run through Saratoga passage, past Everett and thence down the sound to Seattle and home. Home, contented, satisfied and full of deep water gas to tell the rocking chair boys.

FAYBOW Continental

MARINE ENGINES



Model 6-B
6 Cylinder
Faybow-Continental
Marine Engine
Bore 3¾"; Stroke 5"
58 to 90 H.P.

An unexcelled line of powerful six-cylinder, high-speed marine engines, designed especially for runabouts and cruisers. The product of the combined engine building experience of the Continental Motors Corporation and the Fay & Bowen Engine Company, dating back over a quarter of a century. Enormous production facilities make moderate prices possible.

The FAYBOW "Middy"

THE ARISTOCRAT OF OUTBOARD CRAFT

Well named "the Aristocrat of Outboard Craft." This smart-lined model has much the same appearance as the finest high priced runabouts in the water. Its beautifully finished solid mahogany hull, with highly polished cast brass fittings, makes a wonderful impression.

You can get real speed out of the Faybow "Middy"—easily 25 miles an hour, with suitable size outboard motor of any make. And you can turn it about in a boat's length at full speed. It is unusually seaworthy and dry. Just the craft for a yacht tender, runabout or a junior speed boat. Solidly built for long, economical service. Length 16 feet, beam 52 inches, draft 5 inches.

Write for Special Bulletin illustrated in color.

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There's a demand for the FAYBOW and FAYBOW-CONTINENTAL lines in every boat and engine buying center of the United States and foreign countries—a demand sufficient to make it attractively profitable for any distributor to handle them.

Write for our Territorial Sales Proposition.

FAY & BOWEN ENGINE COMPANY, 104 Lake Street, Geneva, N. Y., U. S. A.

FAYBOW MARINE ENGINES AND POWER BOATS

Boating on Arctic Waterways

(*Continued from page* 13)

ing two thousand miles from the border of civilization with the most primitive outfit conceivable; the other had a base above and below, and an equipment that was devised and assembled for no other purpose than the special project in hand.

In the several biographies of Mackenzie which I had read previous to my visit to the Peace, I was struck by the fact that no attempt had been made to follow his voyages in the light of present-day geographical knowledge or to identify carefully other than the most salient points, such as that at which he had crossed the Continental Divide or where he had come to the Pacific. From the fact that the site of his winter fort was so long a matter of doubt, it would seem probable that this has never been done, at least in any such way as Dr. Coues has gone over the routes of Pike on the Mississippi and of Lewis and Clark on the Missouri, Yellowstone and Columbia. The care with which Mackenzie's record is kept will make this a comparatively simple task for the first historian who has the hardihood to back-track in person the water-ways of the original traverse.

My own little dip into history along this line was the result more of chance than of design. Interest in the famous Rocky Mountain Canyon of the Peace was at the bottom of it. When a two-day steamer-stop at the head of navigation offered opportunity to see a considerable part of the remarkable gorge with my eyes I began casting about for the best way to make the most of the chance. The recollection of the fun I had had in checking Powell in the Grand Canyon of the Colorado and Lewis and Clark on the Columbia while boating down their long obliterated water-trails pointed the way. Why not try to see a bit of Rocky Mountain Canyon through Mackenzie's eyes? I had his journal with me, and the story ought to be fairly plain to read now the river had left the shifting bottoms and was concentrated in a channel scoured out of comparatively imperishable rock.

My first inquiry at the Hope revealed the futility of gathering reliable historical information from the natives. The trapper-hunter of whom I asked if he knew where Mackenzie had left the river, replied that "he ain't never left it at all." In fact, he was living right over there on the flat with Mackay's Cree squaw, which would be the makings of a heluva fracas when Mackay got back from Prince George. But he didn't twig what I wanted of a lousy 'breed anyhow. 'Twasn't fair to hire a 'breed when there was a white man to do the job. Was it a guide I wanted?

When another month in the North had revealed to me that for every one of the original Scotch partners of the Hudson's Bay and North-West Companies there are now a thousand half-breeds bearing the same honored name, I learned to frame my historical inquiries more explicitly. To the last, though, I never did quite get over the shock of having an apparently unmixed squaw-of squaws, with a wailing papoose in the slack of her blanket, introduced as Mrs. Mary Mactavish, or a shuffling buck come up and announce that he was Alexander McLean.

When I took my trapper friend at his word and offered him a job helping me push a canoe up the river where a pre-half-breed Mackenzie had made his way, he took just enough time to make sure that I meant it before recalling that he would have to spend the afternoon rounding up his strayed horses to mount the party that wanted to ride up to the head of the Canyon on the morrow. As I expected to need a horse for that journey myself I did not press the river billet.

The proper way to tackle the Canyon from the lower end would be with a canoe and a picked crew of three or four 'breeds or Indians. Planning on the spur of the moment, as I was, there was no chance of finding the right crew, especially at a time when every man at the post was busy either loading the steamer or himself. Steamer-day is also permit-day, and the interval following the arrival of a man's liquor permit (the Northland's euphonism for his monthly case of whiskey from the Licensed Vendor) is not a time for serious thought or effort.

Realizing the impossibility of recruiting a historically-minded crew inside of a week, I resolved, rather than give up my plan entirely, to see what could be done with an outboard motor. There were a number of the useful little kickers about the place, but the first three of four I located were under lock and key, with either their owners or the keys missing McDermid, the Hudson's Bay manager, had a new Evinrude, but after taking me for a trial spin on the river with it, lost interest when he found what I wanted to do. He might need the motor to go back and forth to Peace River between steamers, he explained, and it wouldn't be of any use to him planted up among the rocks of the Canyon, My plea that the planting of a motor among the rocks of the Canyon formed no part of my plans, failed to move him. He had seen too many plans upset in the Canyon, he said, to say nothing of canoes.

Just as it began to appear that such study as I might make of Rocky Mountain Canyon would have to be pursued in the course of a land cruise along the banks, a familiar rat-a-tat from the direction of the river drew my attention to a canoe that had put off from the Indian camp on the farther side. Evidently here was one motor I had overlooked. Meeting the canoe as it touched the shore a hundred yards below the steamer landing, I found it to be the remains of an ancient Peterboro driven by the still more ancient remains of an Elto.

Never short of a junk heap have I seen a motor in so dilapidated a condition. The original model had been that of the first outboard twin. In its day—about six years previously—it had been the opener of a new outboard epoch. The twenty-seven hundred miles I had covered with one of these sturdy little pioneers still remained the longest continuous voyage I had ever made with an outboard.

Yet with all this in mind, I still found it hard to believe that any sort of mechanical contrivance could have survived six years of the kind of treatment an Indian of the North gives his motor. "Treat 'em rough!" is the motto of this lord of the woods, and if there is one thing he bangs about more than his squaws and dogs it is his outboard. And the amazing thing about it is the amount of service this forthright system seems to get out of all three.

Without listing in detail the things that had been done to this particular motor, I might mention that most of the replacements had been with parts from disemboweled clocks, phonographs and sewing machines. Some of these were screwed on, some soldered, and the rest lashed with babiche. The missing flywheel nut had been replaced with one from a buggy. Both filling and draining holes of the gasoline tank were plugged with wood. The carbureter was from an old Evinrude, with the feed-pipe connecting it to the tank having much the appearance of a section of the copper worm of a still.

One had to see it to believe it, of course; but this fearful and wonderful product of the art or artlessness of the savage synthesist actually ran. That it would continue to do so for any length of time was too much to expect, but even two or three hours of action might show me much that I wanted to see.

The youthful buck who piloted this strange hybrid across the river had a humorous twinkle in his dark wide-set eyes that boded hopefully for my purpose. If more Indians had a sense of humor the red man would be less ready to impute madness to the white man he finds attempting something not directly concerned with the belly's need. Where this particular twinkle came from I did not learn, though it doubtless would have traced back to the roosting of some gay bird of passage from the Scotch Highlands making ephemeral roost in a Cree or Chipewan family-tree.

The boy spoke little English though a shrewd quick grin indicated a keen and ready comprehension. Not to strain this by risking confusion with any contemporary Mackenzies, I said nothing about my interest in spying out the trail of the original Alexander but concentrated on a fairly plausible story of wanting to take the canoe up the canyon and then run it back through the rapids. As I would need him principally to help in lining up the bank where the rapids were too swift or too rocky for the motor to make headway, he would not need to ride in the canoe at all unless he wanted to.

As your Northern Indian, like his brother of the American West, is rarely keen on risking his hide either for fun or for hire, I thought this little touch of reassurance might be of help. It was really not needed. Thanks again to that hypothetical Scotch progenitor—one so remote, as it chanced, that this particular descendant still took treaty and was not rated as a 'breed—he was not an ordinary Indian. I have never known a white man with less fear of water, rough water.

When a quick nod and grin gave assurance of sympathy with my general plan I passed on to the question of terms. Then it transpired that my young friend was not the legal owner of either canoe of motor. The rickety Peterboro belonged to his brother while the synthetic Elto he was holding as security for the price of a cross fox skin another Indian had sold for him. But this was a matter of negligible moment. If I would pay him a day's wages and agree to reimburse him the value of the skin if the securing motor was lost in the river, the youthful opportunist offered to contribute the canoe to the cause free of charge. Just how I was to

(*Continued on page* 74)

90% of American Power Boat Builders Use TOBIN BRONZE

Reg. U. S. Pat. Off.

—some have standardized on it for 20 years or more

IT is surely significant that the leading power boat manufacturers in this country have standardized on Tobin Bronze for shafting and underwater metal parts. More than ninety per cent of those exhibiting at this year's Show use Tobin Bronze as standard equipment.

For instance, L. L. Tripp, President of the Albany Boat Corporation, Watervliet, N. Y., states:

> "We have pleasure in stating our satisfaction with Tobin Bronze shafting which we have used for many years in the construction of Albany boats. We use Tobin Bronze shafting in our stock models as well as in our custom-built cruisers and runabouts in which the service is very exacting. We have had uniform satisfaction year after year and are glad to recommend Tobin Bronze shafting."

It will pay you to follow the experience of the best architects, engineers and power boat builders, and insist on genuine Tobin Bronze, exclusively an Anaconda alloy. Tobin Bronze is furnished in Sheets, Rods, Tubes and turned and specially straightened Shafting. The name "TOBIN BRONZE" is rolled in the metal for your protection.

THE AMERICAN BRASS COMPANY
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Canadian Mill: ANACONDA AMERICAN BRASS LTD.
New Toronto, Ont.

ANACONDA SHAFTING

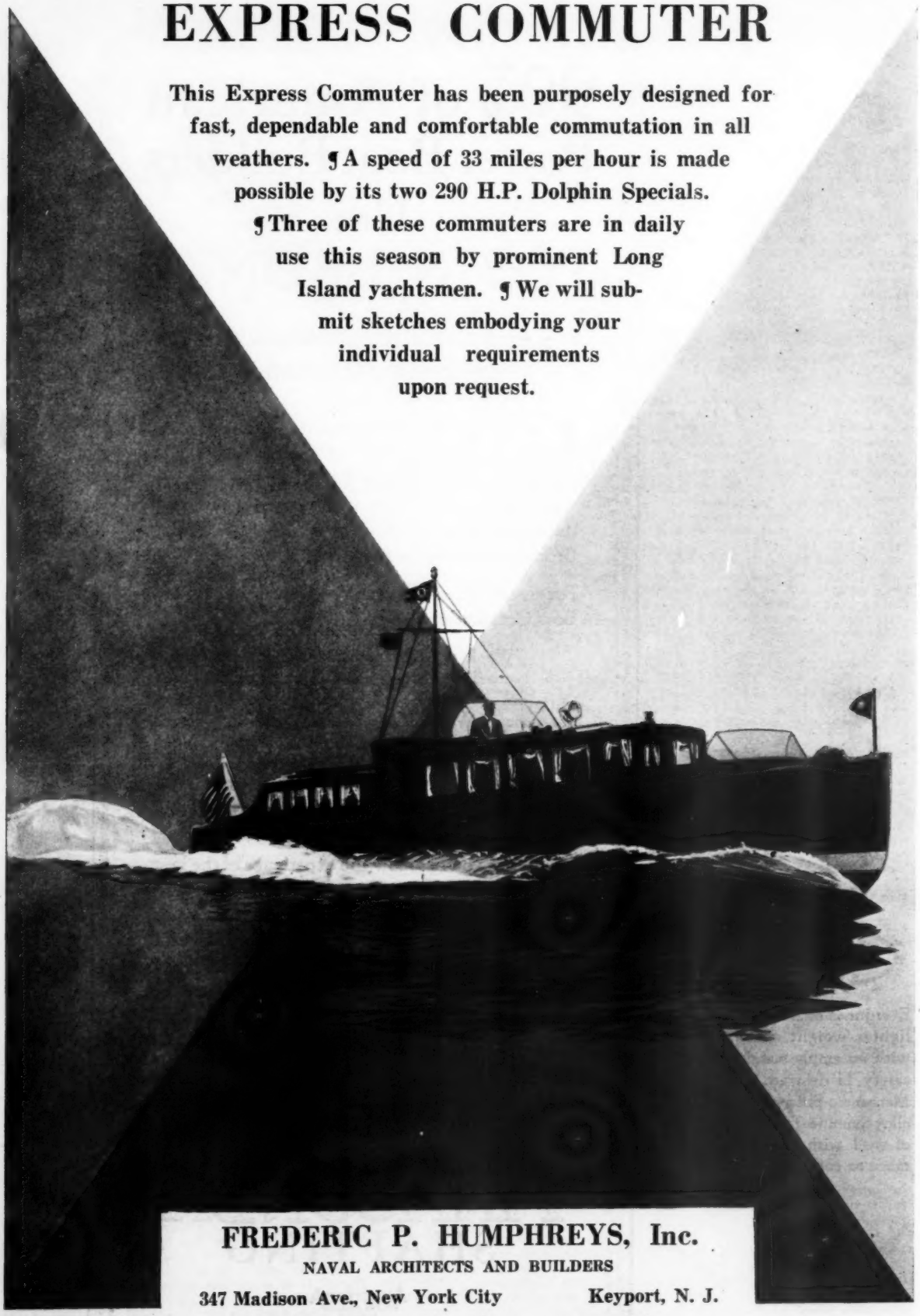
ANACONDA

EVERDUR

Everdur is offered where lighter weight shafting with an ample margin of safety is desired. This Manganese-Silicon Bronze alloy combines the strength of steel with high resistance to corrosion.

EXPRESS COMMUTER

This Express Commuter has been purposely designed for fast, dependable and comfortable commutation in all weathers. ¶ A speed of 33 miles per hour is made possible by its two 290 H.P. Dolphin Specials. ¶ Three of these commuters are in daily use this season by prominent Long Island yachtsmen. ¶ We will submit sketches embodying your individual requirements upon request.



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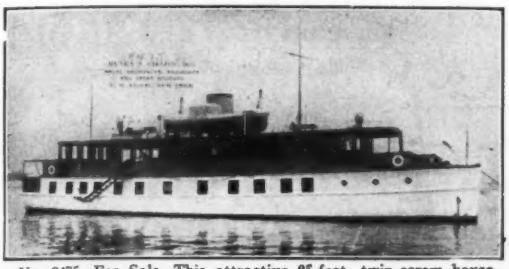
Plans and specifications for new yachts of any size or type should be prepared now to assure delivery for next year. Have plans of new yachts, all types, on file now.

We have a most complete and up-to-date list of steam and motor yachts of all sizes, sail, auxiliary, and house boats, on file in our office, kept constantly up to date by thorough and comprehensive canvass of the entire yachting field from time to time. We are in a position to submit full information on any type of boat upon request

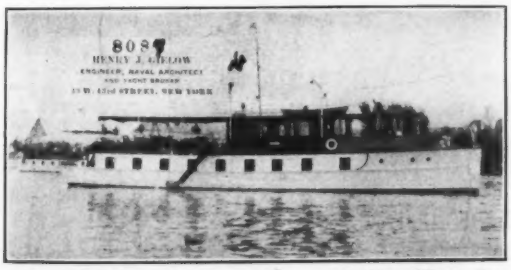


No. 9475—For Sale—This attractive 85-foot, twin-screw houseboat with splendid crew; two large double, two single staterooms; three bathrooms; deck salon, 28'x13', all teak trim. Speedway motors, speed 12-13 miles, no vibration. All modern conveniences and in excellent condition. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

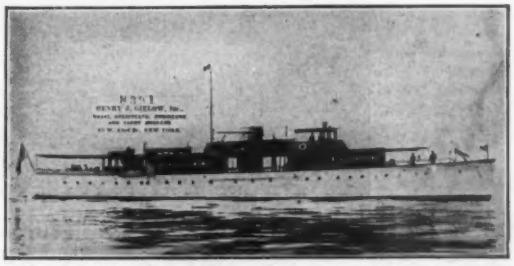
No. 7802—For Sale—Desirable twin-screw gasoline cruiser with able sea qualities and splendid condition throughout. New Winton motors, 1927, speed 14-15 miles. Six staterooms, two baths, deck dining and lounge saloons. New ice plant and completely appointed. Crew, 6-7 men. Entirely overhauled 1927. Price reasonable. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

No. 8201—For Sale or Summer Charter—Attractive prices. Twin-screw houseboat, speed 11-12 miles, all finest condition. Recent build from our design. Two double, two single room, large deck salon, newly furnished, two baths. Sleeps 7-8. Able seaboat handled with five crew. Best purchase in size and type available. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

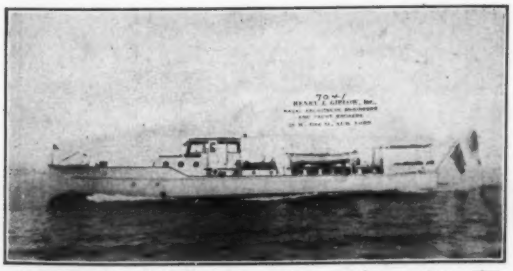
No. 9428—For Sale—Modern twin-screw Diesel yacht, 100 feet with 19-foot beam. Built 1925, best construction. Three staterooms, three baths; speed 14 miles. Electric deck equipment for anchors and boats. Teak trim. Ice plant. Offered at price lower than any other similar craft of high quality. Henry J Gielow, Inc., 25 W. 43rd St., New York City.



No. 8087—For Sale by Estate—Price reasonable. Finest condition; in commission. Eighty-foot modern Mathis Houseboat. Four staterooms, two baths, 22-ft. deck house, fully and attractively furnished, ready for use. Economical operation with crew of six. Winton motors. Speed, 11-12 miles. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.



No. 8391—For Sale—Handsome twin-screw steel motor yacht, 135-foot length, 20-foot beam; five staterooms, three baths, large deck space. Speed 15-18 miles; steady, able. Very complete and handsomely furnished. Lawley built. Seen New York. Opportunity obtain recent built craft; suitable any cruising. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.



No. 7041—For Sale—Twin-screw, fast gasoline cruiser, also suitable for ferry service. Built by Lawley, best construction, always well kept. New Speedway motors, 1927. Two double, three single rooms, bath. All A1 condition. Crew of four. Carrier launch and dinghy. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

No. 9929—For Charter—Able Diesel auxiliary offshore schooner, built late 1926; cruised West Indies 1927 Owner plans building larger boat of same type. Three staterooms, four berths, bath, two toilets. Arcola heater, ice plant, radio and completely equipped Bessemer Diesel motor, speed 9 miles. Crew of 8 for offshore work. Price attractive. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

TAMS & KING

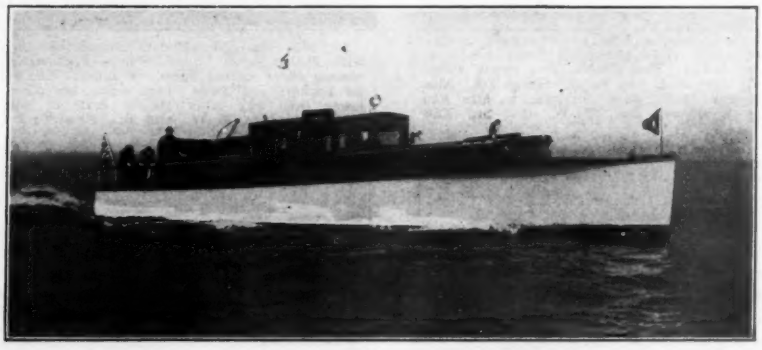
Incorporated

250 PARK AVENUE NEW YORK CITY

Number 8207

Length 50′ Beam 10′6″ Draft 3′

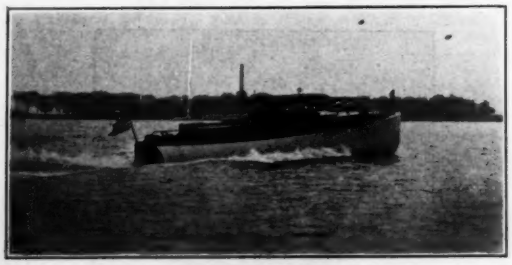
Built in 1922. Power installation: 2 Sterlings, 250 H.P. each. Speed 29 miles.



Number 7885

Length 57′ Beam 10′ Draft 3′6″

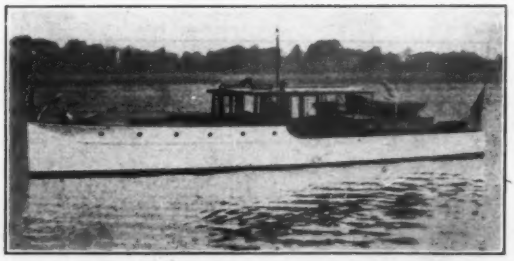
Twin Screw — 2 150-H.P. Speedway Motors



Number 7655

Length 42′ Beam 9′ Draft 2′3″

Built in 1919. Power installation: 2 Speedways, 150 H.P. each. Speed 27 miles.



Number 9692

Length 64′ Beam 12′2″ Draft 2′8″

Built in 1927. Power installation: 2 Murray & Tregurtha, 400 H.P. each.

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AUXILIARIES

14'4" x 5'6"	Cat Boat	(no engine)
22' x 9'8" x 30"	Cat Boat Crosby	10 H.P. Palmer
26' x 12' x 3'	Cat Boat Crosby	12 H.P. International
27' x 9' x 4'2"	Aux. Ketch	7 H.P. Brown
30' x 9'6" x 5'	Friendship Sloop	5 H.P. Hartford
32'6" x 11'4" x 3'	Aux. Sloop	7 H.P. Palmer
35' x 13' x 6'	Aux. Yawl	6 H.P. Kermath
34'6" x 8'10" x 5'2"	Friendship Sloop	7 H.P. Lathrop
36'3" x 10' x 5'9"	Aux. Schooner	7 H.P. Redwing
39'6" x 13' x 3'6"	Aux. Sloop	16 H.P. Standard
40' x 10' x 6'	Aux. Yawl	8 H.P. Redwing
40' x 11'6" x 3'5"	Aux. Yawl	30 H.P. Palmer
41' x 12'6" x 4'	Aux. Yawl	15 H.P. Scripps
42' x 13½' x 7'9"	Aux. Sloop	25 H.P. Mianus
43'10" x 8'10" x 6'3"	Aux. Yawl	8 H.P. Kermath
47'2" x 10' x 6'9"	Aux. Yawl	(no engine)
49' x 12'4" x 6'2"	Aux. Yawl	7½ H.P. Palmer
52'3" x 12' x 7'4"	Aux. Schooner	15 H.P. Scripps
53½' x 10½' x 7'	Aux. Sloop	(no engine)
54' x 15' x 6'	Aux. Yawl	32 H.P. Redwing
56'6" x 15'2" x 4'	Aux. Yawl	18 H.P. 20th Century
58' x 11'5" x 4'5"	Aux. Schooner	35 H.P. Murray & Tregurtha
62' x 12'6" x 9'10"	Aux. Yawl	32 H.P. Redwing
70' x 18' x 6½'	Aux. Schooner	75 H.P. Redwing
72' x 14'6" x 9'9"	Aux. Yawl	20 H.P. Kermath
74' x 16' x 10'	Aux. Schooner	35 H.P. Sterling
76' x 15'4" x 6'10"	Aux. Schooner	50 H.P. Regal
82'8" x 19'4" x 7'10"	Aux. Schooner	50 H.P. Buffalo
83'6" x 18'5" x 7'6"	Aux. Schooner	70 H.P. Automatic
120' x 24'10" x 6'10"	Aux. Schooner	180 H.P. Krupp Diesel

EXPRESS CRUISERS

30' x 7½'	Express Cruiser	220 H.P. Hispano
31' x 9'6" x 2'6"	Express Cruiser	200 H.P. Hall Scott
36' x 9' x 3'	Express Cruiser	150 H.P. Van Blerck
39'11½" x 8'6" x 3'1"	Express Cruiser	100 H.P. Kermath
42' x 9' x 2'8"	Express Cruiser	225 H.P. Sterling
46'6" x 9'6" x 3'3"	Express Cruiser	200 H.P. Van Blerck
50' x 10'6" x 3'	Express Cruiser	(2) 225 H.P. Sterlings
52' x 11'3" x 2'9"	Express Cruiser	(2) 100 H.P. Speedways
64' x 11' x 3'6"	Express Cruiser	(2) 75 H.P. Speedways
65' x 12'6" x 3'10"	Express Cruiser	(2) 300 H.P. Sterlings
66' x 11'6" x 3'	Express Cruiser	(2) 200 H.P. Van Blercks
67' x 13'6" x 3'3"	Express Cruiser	(2) 400 H.P. Packard Libertys
73'6" x 13'6" x 3'9"	Express Cruiser	(2) 200 H.P. Speedways

HOUSE BOATS

38 x 18'	Scow House Boat	(no engine)
42' x 16'	Scow House Boat	(no engine)
45' x 13'3" x 3'	House Boat	66 H.P. Pierce Arrow
49'11" x 13'7" x 3'	House Boat	50 H.P. Standard
52' x 15' x 3½'	House Boat, Mathis	37 H.P. Standard
65' x 15'6" x 3'6"	House Boat	(2) 40 H.P. 20th Centurys
77' x 17' x 4'6"	House Boat	(2) 37 H.P. Standards
80' x 17'6" x 3'	House Boat	(2) 60 H.P. Standards
93' x 18' x 4'	H. B., Mathis	(2) 150 H.P. Wintons

STANDARD STOCK BOATS

26' x 8'6" x 2½'	Elco 1925	20 H.P. Gray
34' x 8'8" x 2'9"	Elco 1924	42 H.P. Elco
34' x 9' x 2'6"	Elco 1925	42 H.P. Elco
2-34' x 9' x 2'6"	Elco 1926	48 H.P. Elcos
41'6" x 10' x 3'	Elco 1921	48 H.P. Elco
41'5" x 9'10" x 3'	Elco 1923	80 H.P. Fay & Bowen
3-42' x 10'7" x 3'	Elco 1926	48 H.P. Elco
45'5" x 10'7" x 3'	Elco 1913	90 H.P. Hall Scott
45' x 11'4" x 3'2½"	Elco 1923	42 H.P. Elco
54' x 12'3" x 3'	Elco 1922	(2) 50 H.P. Elcos
54' x 13' x 3'	Elco 1922	(2) 42 H.P. Elcos
56' x 10'10" x 3'6"	Elco 1919	135 H.P. Speedway
2-56'6" x 13'5" x 3'2½"	Elco 1923	(2) 42 H.P. Elcos
56' x 13' x 3'3"	Elco 1925	(2) 42 H.P. Elcos
33' x 11 x 3'	Matthews 1927 D.C.	85 H.P. Redwing
3-38' x 11' x 3'	Matthews 1926	65 H.P. Kermath
38' x 11' x 3'3"	Matthews 1926	150 H.P. Sterling
38' x 11' x 3'	Matthews 1927	85 H.P. Redwing
38' x 11' x 3'	Matthews 1927	150 H.P. Scripps
2-35' x 9'3" x 3'6"	Gordon 1925	65 H.P. Kermath
36' x 9' x 28"	Blanchard 1926	32 H.P. Redwing

BRIDGE DECK AND RAISED DECK CRUISERS

27' x 8' x 3'	Raised Deck	14 H.P. Frisbie
28' x 8'6" x 3'	Raised Deck	15 H.P. Scripps
30' x 8' x 3'	Raised Deck	50 H.P. Kermath
32' x 8'6" x 2'6"	Raised Deck	25 H.P. Engine
34' x 9'3"	Raised Deck	45 H.P. Scripps
36' x 9' x 2'	Raised Deck	35 H.P. Scripps
37'2" x 8'6" x 3'	Raised Deck	30 H.P. Sterling
38' x 9'6" x 3'	Bridge Deck	(2) 20 H.P. Engines
39' x 10'6" x 3'	Bridge Deck	20 H.P. Van Blerck
40' x 10' x 32"	Bridge Deck	60 H.P. Redwing
42' x 10'6" x 3'6"	Raised Deck	15 H.P. Globe
42' x 8½' x 3'4"	Bridge Deck	60 H.P. Frisbie
43' x 9' x 3'3"	Bridge Deck	130 H.P. Speedway
45' x 9'6" x 3'	Bridge Deck	110 H.P. Sterling
46' x 10'9" x 3'2"	Bridge Deck	120 H.P. Sterling
50' x 10'2" x 3'3"	Bridge Deck	130 H.P. Speedway
52' x 13'6" x 4'	Bridge Deck	50 H.P. Standard
53' x 12'9" x 3'	Bridge Deck	65 H.P. Lathrop
58'6" x 11'6" x 3'10"	Bridge Deck	75 H.P. Murray & Tregurtha
60' x 11' x 3'	Bridge Deck	100 H.P. Sterling
64'6" x 13'6" x 3'5"	Bridge Deck	(2) 187 H.P. Dolphins
65' x 13' x 28"	Bridge Deck	(2) 65 H.P. Kermaths
68'4" x 14'10" x 3'9"	Bridge Deck	(2) 180 H.P. Speedways
71' x 14' x 3'8"	Bridge Deck	(2) 50 H.P. Keystones
80' x 11'10" x 4'8"	Bridge Deck	(2) 180 H.P. Speedways
85' x 13' x 5'	Bridge Deck	75 H.P. Automatic
90' x 15'3" x 4'9"	Bridge Deck	(2) 85 H.P. Wintons
92'6" x 14' x 3'6"	Bridge Deck	(2) 225 H.P. Wintons
94'6" x 15'10" x 4'6"	Bridge Deck	(2) 90 H.P. Wintons
100' x 19' x 5'	Bridge Deck	(2) 150 H.P. Winton Diesels
105' x 15'4" x 4'9"	Bridge Deck	(2) 150 H.P. Winton Diesels
107' x 18'5" x 7'	Bridge Deck	(2) 170 H.P. Bessemer Diesels
110' x 13' x 3'4"	Bridge Deck	(2) 150 H.P. Craigs
120' x 14'4" x 5'	Bridge Deck	(2) 200 H.P. Wintons
127'6" x 17'6" x 6'	Bridge Deck	(2) 160 H.P. Enterprise Diesels

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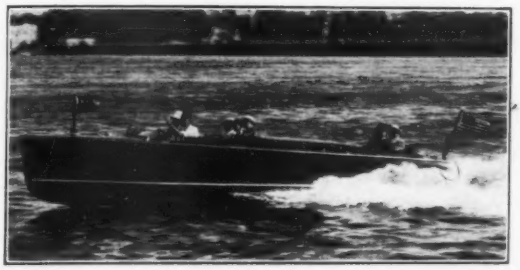
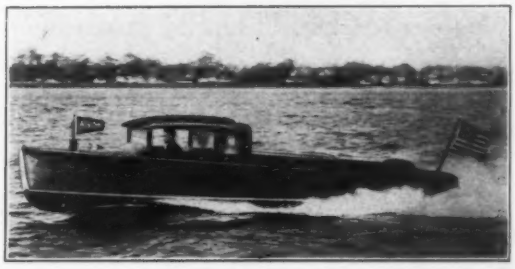


No. 112—**28-ft. BABY GAR JR.**—150-h.p. Scripps Motor. Speed 38-40 miles per hour. New in July, 1927. Motor just overhauled and hull refinished. Cannot be told from new boat..$2,750

No. 119—**1927, 26-ft. BABY GAR JR.**, equipped with 150-h.p. Scripps Motor. Speed 38-40 miles per hour. Hull and motor in good condition. Canvas waterproof over-all cover. Can demonstrate $2,850



No. 105—**28-ft. BABY GAR JR. Sedan.** Delivered early in August, 1927, and used on fresh water lake. Hull revarnished and motor in 100% condition. Boat was only used four weeks; is now located in New York and can be demonstrated; just as good as new and carries new boat guarantee.....$3,500

No. 117—**28-ft. BABY GAR JR. Sedan**—150-h.p. Scripps Motor. This boat delivered new in July, 1927. Has been used as tender on large yacht. Finished in black. Motor 100% condition and hull has just been repainted. A handsome craft..$3,200

150-h.p. Model G-6 Scripps Motor. Brand new. Never used.....$1,500

No. 111—**33-ft. BABY GAR**—400-h.p. Gar Wood Liberty Motor. Speed 50-52 miles per hour. This boat was delivered new in August, 1926. Was used two weeks and has since been in storage. Our men have just gone over motor completely. Hull has been refinished in our own plant. This boat carries new boat guarantee and will demonstrate.....$7,500

No. 118—**33-ft. BABY GAR**—400-h.p. Gar Wood Liberty Motor. Speed 50-52 miles per hour. Boat new in 1925. Always has been used in fresh water. Hull just refinished a dark red mahogany. Motor rebuilt, incorporating all latest improvements. Can demonstrate $6,000

No. 120—**33-ft. BABY GAR**—400-h.p. Gar Wood Liberty. Always in fresh water. Motor just overhauled. New late summer 1926. In first-class condition, as owner always had a man on it $5,500

No. 113—**25-ft. Fay & Bowen**—60-h.p. Fay & Bowen Motor. Speed 25 m.p.h. Originally cost $4,100. An ideal family boat and in excellent condition.....$1,100

No. 114—**23-ft. Sea Sled Sedan**—Buda Motor. This boat was delivered new in August, 1927. Finished in black. Excellent condition and an exceptional bargain at.....$1,500

No. 115—**28-ft. HACKER DOLPHIN**—125-h.p. Scripps Gold Cup Motor. Speed 32-34 miles per hour. This boat is in excellent condition and owner selling only as he is no longer near the water $2,000

No. 116—**TAMPA BAYBY**—21'6" x 5'6", Hacker designed and built. New 1926. Speed 37 m.p.h. with 125-h.p. Scripps Gold Cup Motor. Entire motor and hull just completely overhauled. New Monel Metal shaft, complete new ignition, brand new battery; hull refinished and complete with over-all cover and cradle; cost $3,500. Can be bought for.....$1,850

No. 121—**28-ft. DODGE Water Car**—Curtiss Motor. Speed 33-35 m.p.h. Seats six in forward cockpit and three in after cockpit with room for two additional chairs. Motor just overhauled; hull perfect $1,200

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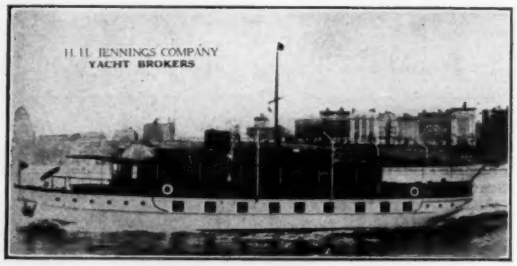
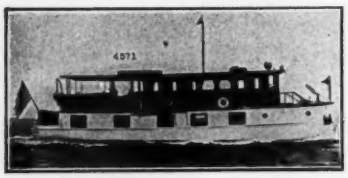


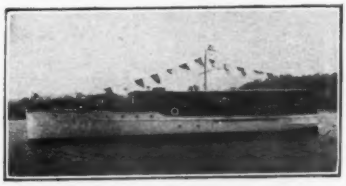
No. 4678—Sale or Charter. 94-ft. Mathis houseboat. Three double and one single staterooms. Dining saloon and living room in deckhouse. Three toilets, baths, etc. Splendid crew's quarters. Two 200 H.P. Winton motors. Speed 14-15 miles. Frigidaire icebox. Hot water heat, electric plant, etc. Strictly up-to-date and the latest Mathis design.

No. 1419—Twin screw steel power yacht. 110'x16'x4'8". Large deckhouse containing dining saloon and living room. Six double staterooms. Two bathrooms. Large galley. Good crew's quarters. Two 250 H.P. Winton motors, new 1927. Hot water heat. Universal electric plant. Speed 14-15 miles. Large fuel and water capacity. Splendid condition. Further particulars upon request.



No. 4571—57 ft. power houseboat. Two double and one single staterooms. Three toilet rooms, bath. Large deckhouse containing dining and living room. Two berths and toilet for crew. Large galley. 50-60 H.P. Standard motor. Speed 9 miles. Electric lights, etc. Attractive proposition.

No. 2946—62-foot Twin-Screw Elco Cruiser. Two double and one single staterooms. Four berths in dining saloon. Large roomy deckhouse. Separate pilot house. Two toilets, one bath. Crew's quarters forward. Two 94 H.P. Elco motors. Speed 13-14 miles. Electric lights, etc. Can sleep nine in owner's party. Very staunch and seaworthy.



No. 2927—70 ft. twin screw power yacht. One double and two single staterooms. Two transoms and two Pullman berths in main saloon. Large deckhouse, used as living room. Bathroom with full size tub. Separate toilet room. Good Gerew's quarters. Two 100-150 H.P. Sterling Coast Guard motors. Speed up to 15 miles. Electric lights. Hot water heat, etc. Launch and dinghy. Price attractive.

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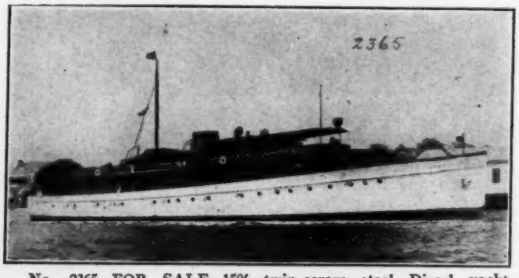
(SOUTHEAST CORNER 42nd STREET)

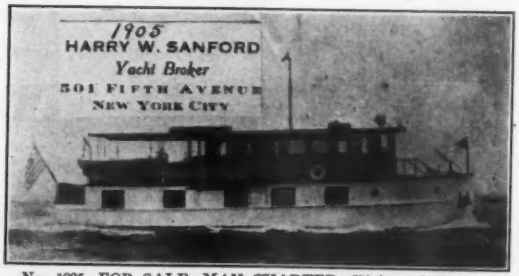
GEORGE W. ELDER ASSOCIATE



No. 2365—FOR SALE—150' twin-screw steel Diesel yacht, speed 20 miles. Cruising radius, 5,000 miles. Has 6 large double staterooms, ample bathrooms, etc. Beautifully furnished and finished and the most attractive fast Diesel yacht available.

No. 1903—FOR SALE OR CHARTER—100' twin-screw cruising houseboat, speed 13 miles. Built 1925. Has 5 staterooms, 3 bathrooms, deck dining salon, music room, etc. A palatial floating home, exquisitely furnished.

No. 2303—FOR SALE—60' cruiser, speed 12 miles. Has 2 double staterooms, berth in salon, 1 bathroom. Built in 1926. An excellent cruiser of the most modern type. Other boats of this type from 40' to 150' in length.



No. 1905—FOR SALE—MAY CHARTER—57' houseboat, speed 11 miles. Has 1 single, 2 double staterooms. Living room and dining salon on deck. A delightful cruising home, beautifully furnished.

Advertising Index will be found on 3rd last page

YACHT BROKERS
NAVAL ARCHITECTS

HENRY C. GREBE & CO., Inc.

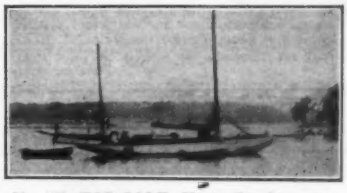
MARINE INSURANCE
SURVEYING

Wrigley Building: 400 NORTH MICHIGAN AVE., CHICAGO—Telephone: Superior 0806

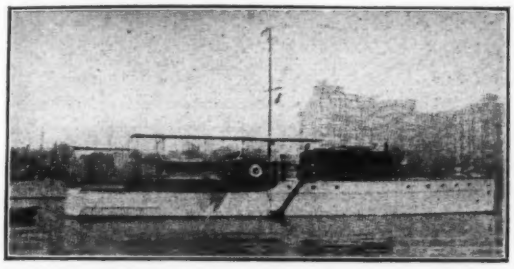
WE HAVE A COMPLETE LIST OF ALL STEAM AND POWER YACHTS, AUXILIARIES AND HOUSEBOATS, WHICH ARE FOR SALE AND CHARTER. Plans, photographs and full particulars furnished on request.

No. 2420—FOR SALE—One of the popular Great Lakes Sea Villas, 36'x9'11". Kermath motor. Unusually roomy cockpit, large galley and comfortable accommodations for six. Heavy construction and fine finish. Easily handled by one man. Good seaboat. Inquire Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.

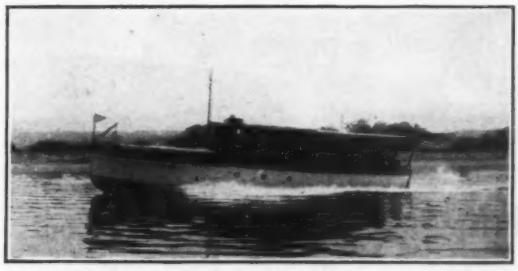
No. 106—FOR SALE—Fine 40' Power Boat. One double stateroom, dining saloon, galley, two toilets. Speedway self-starting motor. Attractive price. Excellent condition. Particulars from Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.



No. 555—FOR SALE—Unusually fine auxiliary yawl, 55'x36'x4'6". Speedway motor in first-class condition. Boat in commission ready to go. Particulars from Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.



FOR SALE—73'x13'6"x3'6" twin-screw cruiser. Two Speedway motors. Speed up to 18 miles per hour. Two single, one double staterooms, two toilets with showers, dining saloon with two transoms in deckhouse. Boat in excellent condition. Further particulars from Henry C. rebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.



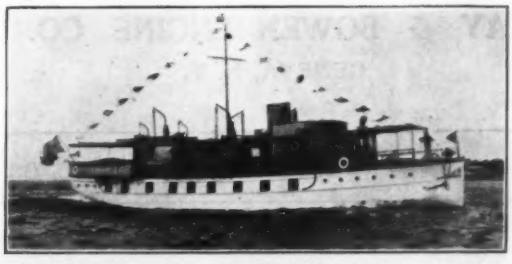
No. 1013—FOR SALE—50' express cruiser, powered with two 6-cyl., 150-H.P. Sterling Dolphin motors. Speed over 20 m.p.h. Enclosed bridge deck, comfortable owner's stateroom with two built-in berths and two pullman berths and guest stateroom. Sleeps eight. Space for crew forward. Unusually attractive price. Particulars from Henry C. Grebe & Co., Inc., 400 N. Michigan Ave., Chicago, Ill.

WILLIAM GARDNER & CO.

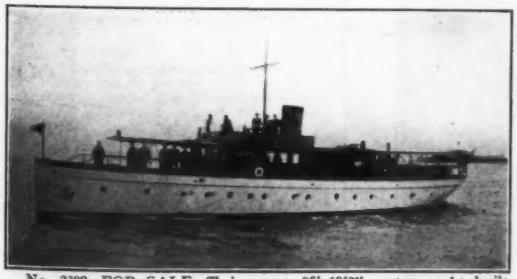
Naval Architects, Marine Engineers and Yacht Brokers

Phone: Bowling Green 8638 — **No. 1 BROADWAY, NEW YORK** — **Cable Address: Yachting, N. Y.**

No. 2334—FOR SALE—Twin-screw Lawley-built 85-foot power yacht. Hull double planked. Speedway motors, new 1927. Nicely fitted and furnished. Price very attractive.



No. 260—FOR SALE OR CHARTER—Twin-screw 94-foot houseboat. New 1927. Handsomely furnished and well equipped. Ready for immediate use.



No. 2389—FOR SALE—Twin-screw 95'x19'2" motor yacht built in 1924. Able and wholesome. Good accommodations and deck space. Ready for prompt use at very reasonable price. Full details on request. WILLIAM GARDNER & CO., ONE BROADWAY, NEW YORK CITY.

No. 2662—FOR SALE—Highly desirable 50-foot twin-screw express cruiser. Speed 28-30 miles. In excellent condition throughout and ready for use. Unusual opportunity to purchase advantageously. Full details on request. WILLIAM GARDNER & CO., ONE BROADWAY, NEW YORK CITY.

THE MOTOR BOATING MARKET PLACE

The rate for "For Sale" and "Want" advertisements is 8 cents per word, minimum $2.00. If an illustration is used, the charge is as follows, which includes the making of the cut:

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Opportunities for the Motor Boatman

Before you buy or before you sell examine the exceptional buying and selling opportunities under this heading. They comprise the best offers of the month. Please mention MoToR BoatinG.

MoToR BoatinG, 57th St. at Eighth Ave., New York

Classified advertisements set entirely in small light face type. No extra charge for capitals. Bold face type used at display rate, $12 per inch, single column. New advertisements can be accepted up to twelfth of month for following issues.

SPECIAL BARGAINS

In New and Used Faybow Runabouts

20-22-25-27-30 feet in length

This is an exceptional opportunity. Act quickly before someone else gets the boat you want. All boats available for immediate delivery. Prices unusually low.

FAY & BOWEN ENGINE CO.
GENEVA, N. Y.

26' NEW YORK CRUISER DEMONSTRATOR
26' x 9'6 x 2'4

Used only for a few demonstrations. Absolutely like a new boat: 20-24 H.P. Kermath electric starter and electric lights. In perfect condition. A bargain $2,500.00

BRUNS KIMBALL & CO.
50-52-54 West 17th St. New York City

OPPORTUNITY

For young man of university training, good connections and familiarity with the better class of yachts. Must have personality, persistence and continuous effort. To become associated with Brokerage Department of a well established firm handling the larger and more expensive types of yachts. Address Box 93, care MoToR BoatinG.

FOR SALE—New enclosed 40' x 11' bridge deck cruiser, Sterling Dolphin motor, speed 27 miles per hour. Built by the Rochester Boat Co., 1927. Fully fitted out and ready to go to sea. A very beautiful boat, built of mahogany and finished in natural wood. An attractive price for a quick sale. Address Geo. W. Mercier, Clayton, N. Y.

Raised Deck Cruiser, 34x9; mahogany cabin; seaworthy, reliable, fully equipped, newly painted and put in commission. Leaving city, must sacrifice—$1,800.00. Box 96, MoToR BoatinG.

30-50 H.P. 4 cyl. 5½x6 Sterling, brand new cylinders, manifold and carburetor, in perfect shape, very cheap. F. E. Couch, Hotel Carteret, New York City.

SPEED BOAT—Biscayne Baby, Purdy built, motor 125 H.P. Scripps Junior Gold Cup. Speed 42 miles per hour and better guaranteed. Price $1000. Also double planked mahogany hydroplane hull, with gear boxes, shafting, and all controls. Boat could easiy make over 60 miles with right motor. Price $600. Fred S. Costello, 3038 Emmons Ave., Brooklyn, N. Y.

60-75 H.P. 6 cyl. 6½x8 Murray & Tregurtha, overhauled by factory man, offered reasonable. A. Jesson, 340 77th St., Brooklyn, N. Y.

"BARGAIN—Elco Cruisette—purchased July, 1927. Practically new, in commission. $4,800.00. Frank V. Borick, 262 West 57th St., Phone Columbus 1574.

24 H.P. Lamb 4 cyl. 4 cycle with starter, generator, double ignition, in good shape, very reasonable. J. S. Lobenthal, 561 West 163rd St., New York City.

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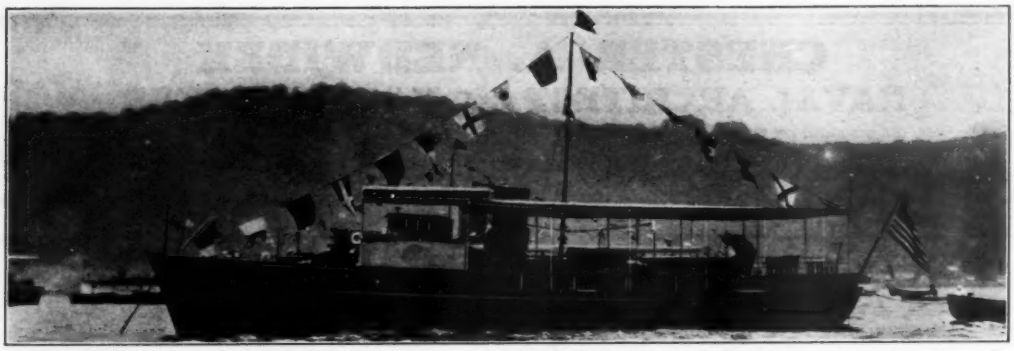
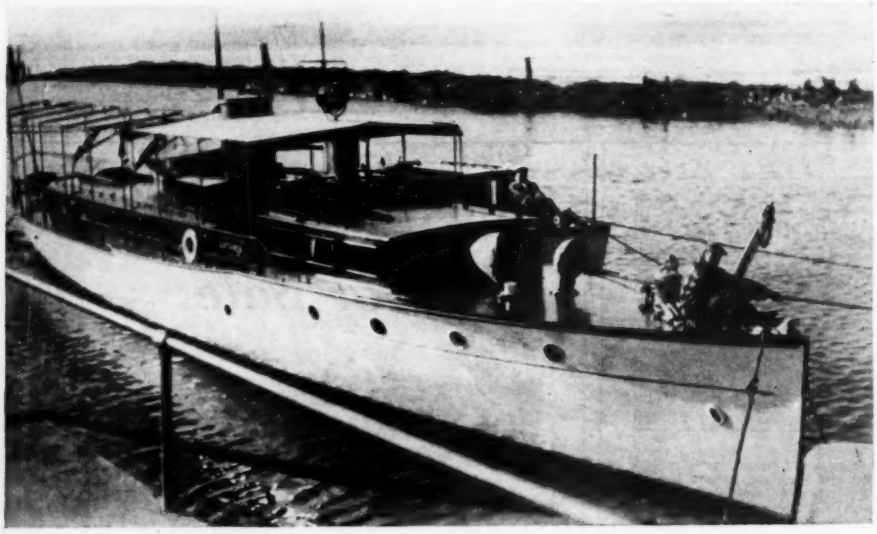


Yacht "Lolomi" For Sale

This 52' Yacht is now being offered for quick sale due to change in owner's plans. Condition of yacht makes her available for immediate use. Has large double stateroom and 4 additional berths in main cabin. Has excellent power plant and most complete equipment. The "Lolomi" can now be purchased for $5,000.00. Quick action is necessary. Inspection in New York City. Further information. John H. Wells, Inc., 11 East 44th St., New York City—Murray Hill 3126.



FOR SALE OR CHARTER

Bridge deck cruiser, 70x11x3½ ft., speed 14 miles per hour, exceptionally fine construction and finish with all modern comfort and convenience, such as independent electric plant. Protane cooker and broiler, refrigerator, air whistle, large light dining room and cabin with pullman berths, private state room with two large berths, toilets and wardrobe, fine galley crew's quarters and galley forward communicating with the dining room. Bridge deck, with extra inclosure, mahogany divan built in, with leather cushion, equipment new 1928. Decks natural wood, African mahogany and ivory finish designed and constructed by old established boat builders from the best material and workmanship obtainable. A beautiful summer home for the season in northern waters and for winter in the south, now in commission with crew of two in Phila. waters, ready to go at a moment's notice; can be seen and tried by appointment. Owner's change of plans for the summer prevents using yacht this season. No reasonable offer refused. Inspected by Underwriters, March, 1928, insured under class A-1. Address: A. E. Emerson, 6081 Overbrook, Pa. Phone: Overbook 2361.

For Sale—Gar Wood 28, 1927 model, 45 miles per hour, 225 horsepower, run less than seventy hours. C. B. Howell, Medina, N. Y.

For Sale—Cheap, pair of 400 H.P. 6-cyl. 7¼x9 Murray & Tregurtha engines, oil coolers, shafts and propellers. Sell singly or pair. Linden, 413 E. 152nd St.

Cruiser—43'x10'x36", Scripps E-4 engine, speed 14 miles; fully equipped; excellent condition. Price $3,000. F. Opperman, 181 Milbank Ave., Greenwich, Conn. Telephone: 340-W.

FOR SALE—Gordon special 28 foot fast day Cruiser. Practically new. Bargain. Phone C. L. Miller, Owner, TRIANGLE 6900.

Banfield Sea Skiff Cruiser, 28', full equipment, all new. 4 berths, Pierce 66 Motor first year, 18 M.P.H. Sacrifice $3,700, in commission. W. H. Curran, 193 7th St., Brooklyn, N. Y.

FOR SALE—Hundred foot by hundred foot lot on Manhasset Bay in the new Carl G. Fisher Development, Rayview Colony, Port Washington, Long Island. All improvements completed, including dock and floats, enclosed swimming pool, tennis courts, etc. Boat or yacht can be moored in the best of anchorages 500 feet from lot. Four yacht clubs in immediate vicinity; thirty-five minutes by electric train to Pennsylvania Station, New York City. Would make excellent site for summer or all-year home for yachtsman. Address Box 15, care MoToR BoatinG, 119 West 40th St., New York City.

For sale—Flush Deck Cruiser, 52x13x4. One-man control, 60 H.P. four cycle, six cylinder engine, 12 volt lighting system, Gould batteries, Dodge generator, 3 H.P. auxiliary engine, full headroom throughout. Bargain price for quick sale. B. C. Pfeiffer, 15 West 123rd Street, New York City.

Chris Craft Cadet, all mahogany. Speed 35 miles. Chrysler Imperial marine motor. Cannot be told from new. Cost $2,495.00 Immediate sale $1,500.00. Capt. Wallace, Russells' Point, Ohio.

I have 190 H.P. 6 cyl. Loew Victor Harbeck 7½x8½ I will sell very cheap, in good running condition. E. H. Meury, 70 Charles St., Jersey City, N. J.

112-150 H.P. model M 6 cyl. Van Blerck, starter, generator, triple ignition, Paragon reverse gear, a bargain for someone. E. L. Goodwin, 50 West 67th St., New York City.

74 H.P. model M Van Blerck completely equipped in tip top shape; cheap. Chas. A. Brown, 663 Ave. E, Bayonne, N. J.

60-75 H.P. 6 cyl. 6½x8 Murray & Tregurtha, overhauled by factory man, offered reasonable. A. Jesson, 340 77th St., Brooklyn, N. Y.

6 cyl. 90 H.P. Spedway 6" bore 6" stroke completely equipped, in fine running shape. Have purchased larger engine. Will sell cheap. A. Hoffman, 337 7th Ave., Astoria, L. I.

RICHARDSON CRUISABOUTS, WHEELER SEA SKIFFS, FLEETWING CRUISERS and other stock boats. F. D. Homan, agent, 78 Riverside Ave., Amityville, L. I., N. Y., Tel. 110. Demonstrations. Trades. Terms. Also a number of used boat bargains. Boats wanted. Taken on sale or bought for cash.

FOR SALE—Cat Boat, staunch, able. Built by Morgan Bros., Noank, Conn. In commission on or before July 1st. E. E. Knapp, Box 135, Waterford, Conn.

8 cyl. 170-200 H.P. model F. Sterling 5½x6¼, starter, generator, etc., in good running condition. Bargain. H. Moriority, 105 West Hayes Ave., Corona, L. I.

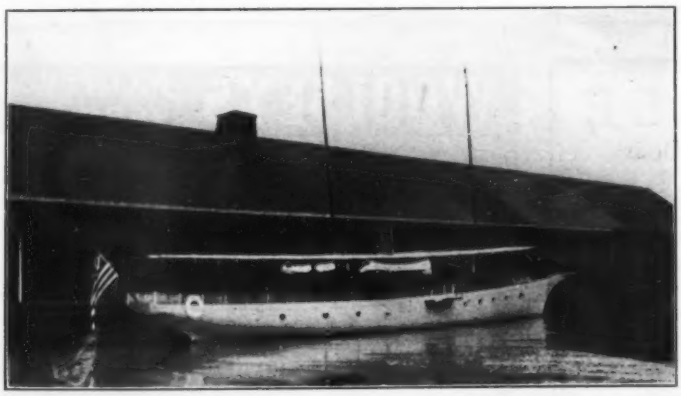
Sea Skiff—26-ft., built new August 1927. 9-ft. beam. All brass equipment; mahogany trim. Low cabin 8 feet long, sleeping quarters for two. Open forward cockpit. 70 H.P. seven bearing motor. Speed 20 m.p.h. Built by master craftsmen for deep sea fishing Boat in service only four weeks. Price $2,200. Newton A. Barnett, Nash Auto Sales, 20 Westfield Ave., Elizabeth, New Jersey.

FOR SALE—Cruiser Swan, 35 x 8 x 3. 70-H.P. motor, Joe's reverse gear, Perfect hull, Mahogany cabin sides, Searchlight, Siren, Ropes, Anchor, Dishes, Stove. Toilet. Sleeps four. Motor and gears recently overhauled so that it is ready for the season. Bargain for quick sale. S. D. Keller, M.D., 217 Oneida St., Fulton, N. Y.

A 26-FT. MAHOGANY RUNABOUT, equipped with OX Curtis Capitol Conversion Motor, speed 32 miles, price $2,200. 1927 list price $3,150. Show room boat, has not been used. Specification on request. Dunphy Boat Mfg. Co., Eau Claire, Wisc.

Advertising Index will be found on 3rd last page

No. 9421—FOR SALE—Real cruising Play Boat, 50' x 11'8" x 4', built our design 1925. Following year cruised Canada, Florida, Gulf of Mexico, Mississippi River and Great Lakes to New York. Able sea boat, ruggedly built; two Speedway motors, speed 12-13 miles. All in fine condition and complete. Price reasonable.
HENRY J. GIELOW, Inc., 25 West 43rd St., New York.



FOR SALE—Herreshoff Str. Yacht 99' x 13' x 5' 4", recently rebuilt. Boiler and motor in good condition. Fully fitted out. Price very attractive. Address Geo. W. Mercier, Clayton, N. Y.

FOR IMMEDIATE DELIVERY
20 ft. 2 cockpit Runabout
Just as good as new, 20 miles per hour.
H. B. ROBERTS
275 Connecticut Boulevard
East Hartford, Conn.

Cruising houseboats, 65' x 18', built 1920, 100 H.P. —price $12,500; 63' x 18'—price $10,500. Three-masted auxiliary schooner yacht, 132' x 25'—price $45,000. Harry L. Becher, P. O. Box 389, Miami, Fla.

WANTED—2 motors, 15 to 20 H.P., Standard makes, reverse gear and starters. Price reasonable. Near New York. Address: John Hotine, 15 Washington St., Flushing, L. I., N. Y.

SPEED BOAT—40 miles per hour—20 ft.—mahogany deck, cedar hull, electric starting and lighting system, Hall Scott converted aviation motor. $1000. Demonstration, Hartford, write O. V. Mathews, Avon, Connecticut.

FOR SALE—Sterling engine, reconditioned by Sterling Co., Model GR, 4 cylinders, Bore 5¾, Stroke 6¾. Dolphin Model. Rated 150 H.P. W. L. Hurley Co., 801 Broadway, Camden, N. J.

FOR SALE—Single cylinder four cycle Doman engine with high tension magneto impulse starter ignition and reverse gear. Has been run very little. John E. Harrison, Shelby, Mich.

FOR SALE—Dodge Watercar 22'2" overall, mahogany hull. Speed 25 M.P.H., electric lights, starter and generator. Used one season on N. J. inland lake. Entire outfit like new. $1500. Box 94, MoToR BoatinG.

MARGARET HYDRO complete with Roberts 151 V motor, 18 ft. runabout, Roberts RS motor. Priced low for quick sale. M. C. Jewett, Traverse City, Mich.

150 KERMATH—1927 model, starter, generator, double ignition, etc. Completely rebuilt and guaranteed. Bargain.
BRUNS KIMBALL & CO.
50 West 17th St. New York City

FOR SALE—Ferro three cylinder 24 H.P.—5" x 5" engine; has Ford starting motor, magneto ignition; completely overhauled; first class condition. $225.00. C. L. White, Bradford, Penna.

Four cyl., four cycle with reverse gears: 25 H.P. Model Z Gray unit plant with starter-generator, $245; 25 H.P. Danielson unit plant, $145; 30 H.P. Red Wing, $195; 35 H.P. Erd unit plant with starter-generator, $325; 35 H.P. Doman unit plant with starter-generator, $395; 40 H.P. Doman 6 x 6, $225; 40 H.P. Wisconsin six cyl., 4¼ x 5, with starter-generator, $345; 20 H.P. Buffalo two cyl., 6½ x 7, $265; 300 H.P. Fiat six cyl. with Gar-Wood conversion, starter-generator, $545; 25 H.P. Gray Model T, three cyl. two cycle and others, $75. Badger Motor Company, Milwaukee, Wis.

WANTED TO BUY—Curtiss OX or OX5 motor with or without conversion. A. H. Lauson, 215 North Ave., Milwaukee, Wis.

Pair 140 h.p., 6 cyl., 6½x9 Wintons, in perfect condition; recently overhauled; completely equipped. Sold singly or in pair. A real bargain. Act quickly.
Bruns, Kimball & Co., 50 W. 17th St., N. Y. C.

FOR SALE—151 Peerless motor, ready to race. Only used six weeks. Same as new. Write for further particulars. John A. Galloway, Saranac Lake, N. Y.

FOR SALE—1923 Elco Cruisette
In commission, fully equipped, engine new in 1925—demontration at 80 South Bayshore Ave., Bayshore, L. I. Price, $3,000. No brokers.
L. FOUNTAIN.

JULY BARGAINS: 5 H.P. 4 cycle $79; 10 H.P. Kermath, clutch, magneto $150; Kermath 20 magneto $250; Gray Six Cyclinder 60 H.P. $400; Gray "Six-72" $495; two experimental EIGHTS 115 H.P. $700. GRAY MARINE MOTOR COMPANY, DETROIT, MICHIGAN.

FOR SALE—MATTHEWS special double cabin cruiser, new in October, 1927 Has been driven about 100 hours. 70-H.P. Kermath motor. Fully screened, Rugs for cabins and bridge deck, Compass and Binnacle, Log, Searchlight, Dishes and Bedding, Charts and Chart Table. Equipped with many extras. Cabin sides mahogany. S. D. Keller, M.D., 217 Oneida St., Fulton, N. Y.

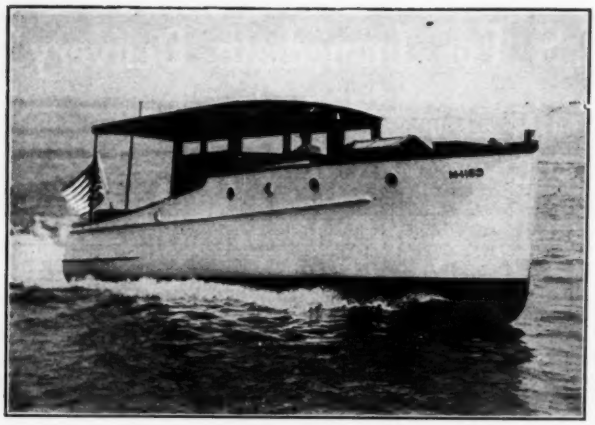
WILL SELL a pair of brand new 8 power Zeiss-Deltrintem prism binoculars of finest quality, with leather carrying case. Excellent for yacht work. F. W. Horenburger, 4263 Byron Ave., Bronx, N. Y.

FOR SALE—1 twenty-five gallon cylindrical heavy gage galvanized gasoline tank, less than one hour's use, $10.00 guaranteed. Also 1 single unit Auto-Pulse system brand new $9.00. See or phone A. E. Sedgwick, c/o Motor Boating.

FACTORY REBUILT KERMATH ENGINES
Pick Yours From This List

12 H.P.	Unit F	$ 350
16 H.P.	Unit F	$ 375
20 H.P.	Unit F	$ 400
20 H.P	Unit F (with starter)	$ 475
35 H.P.	B.E.F.	$ 750
50 H.P.	B.E.F.	$ 850
100 H.P.	B.B.E.	$1150

These motors have the factory guarantee of one year on them They are bargains at these prices.
Kermath Mfg. Co., 5879 Commonwealth Ave. Detroit, Michigan



Comparison Proves MARCO Value

SPECIAL MODEL
Speed 20 M.P.H $6500
Speed 15 M.P.H.....$5800

STANDARD MODEL
Speed 12 M.P.H..... ...$4800

NOTHING so surely emphasizes the superior value offered in the Marco 33-footer than a comparison of this remarkable cruiser with other boats in its price class. Real cruising comfort for five—stout construction—subtle lines—and better than average speed. Immediate delivery.

Write today for illustrated literature

MARINE CONSTRUCTION CO.
Wilmington - - - Delaware

We have several exceptional bargains in used cruisers

TAFFRAIL LOGS

The speed of your vessel and the distance run can be determined accurately only with the aid of a log. Such knowledge becomes especially vital in thick weather when dead reckoning is relied upon.

THE BLISS TAFFRAIL LOG
pictured is the most popular moderate speed log in the world.

Complete in a neat wooden box with instructions, $30.00

Send for catalog of nautical instruments.

JOHN BLISS & CO., Inc.
83 Pearl Street, New York
Whitehall 9424

1835 Ninety-three years of Service 1928

MARINOBILE

The FORD Powered Motor Boat

GUARANTEED speed better than twenty-five miles per hour.

Our Marine conversion appliance with patented oil cooler makes possible continuous running at high speed without overheating.

Write for catalogue.

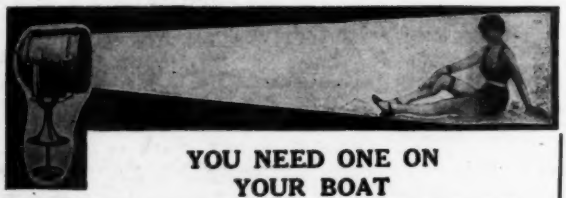
T. J. BUTLER

SHOWROOM AND SERVICE STATION:
470 PASSAIC AVENUE KEARNY, N. J.

WOOLSEY'S PAINTS & VARNISHES

TUNGSPAR VARNISH
Durable—Lasting
High Gloss
Will Not Turn White
Try It, and you will always Buy It.

C. A. WOOLSEY PAINT & COLOR CO.
JERSEY CITY NEW JERSEY, U.S.A.



YOU NEED ONE ON YOUR BOAT

SEARCHLIGHTS

All Sizes and Types for Yachts and Motorboats

CATALOGUE A—ARC SEARCHLIGHTS
CATALOGUE I—INCANDESCENT SEARCHLIGHTS
FLOODLIGHTS FOR ALL PURPOSES

THE CARLISLE & FINCH CO.
261 E. CLIFTON AVE. CINCINNATI, OHIO

Brooks KNOCK-DOWN BOAT FRAMES for CRUISERS — RUNABOUTS OUTBOARD BOATS—HYDROPLANES ROW BOATS and SAIL BOATS

THE Brooks System is the only system of boat building that is really easy. It's the simplest, quickest and most scientific method of building any type of boat. You have over 55 thoroughly modern designs to choose from. Our book of designs gives plans and descriptions of hydroplanes, cruisers, runabouts, outboard speedsters, row boats and sailboats. And you'll be astonished at the saving you can make by building these boats yourself. Send 25 cents for this book today. Don't put it off. You can still build a boat in time to enjoy it this season.

BROOKS BOAT CO., Inc., Dept. 33, Saginaw, W. S., Mich.
Originators of the Pattern and Knock-Down System of Boat Building

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Yard *and* Shop

(*Continued from page* 46)

continuously during fog or low visibility.

The development of a similar system on the Great Lakes has been in progress for over two years and has been highly successful. Twenty-one beacons are now in operation on the Lakes and about 400 vessels are regularly navigating by these signals on which accurate bearings can be taken the full length of any of the Lakes.

J. Frederic Tams Dies

J. Frederic Tams, naval architect, ship broker, and yachtsman, died at his country home at Tuxedo Park, New York, on May 27th. Mr. Tams maintained an active interest in the firm Tams and King despite his eighty-one years of age, until shortly before his death. Mr. Tams was born in Philadelphia and educated in New York. He was an active yachtsman, a member of the New York Yacht Club, Society of Naval Architects and Engineers, and the United States Naval Institute as well as a number of other prominent clubs. He served as president of the Union Club and under his administration purchased a new site on Park Avenue, New York. Mr. Tams also was one of the board of managers of the Seamen's Church Institute and a trustee in other Seamen's Societies.

How to Use Plastic Wood

The Addison-Leslie Company, manufacturers of Plastic Wood, have added to their staff a consulting engineer who will specialize in the adaptation of Plastic Wood for construction and repair purposes for boats, particularly for those repairs which the individual boat owner can do and likes to do himself. Inquiries as to methods of using Plastic Wood in the most satisfactory and economical way will be studied with particular application to the problem in question, without charge, and the company officials will welcome all such requests for information from individual owners, yards, or other sources. They should be addressed to Engineering Service Department, Addison-Leslie Company, Canton, Mass.

Stock Cruiser for Bureau of Fisheries

The Matthews Co. of Port Clinton, Ohio, delivered a Matthews 46 stock cruiser a short time ago to the Bureau of Fisheries of the Department of Commerce. The boat will be used by the Division of Scientific Research in off-shore investigations along the Atlantic Coast. Obviously this is work which calls for a real seagoing craft and it is significant that a popular stock standardized cruiser should be chosen for the job.

The cruiser is a 46-foot model with open deck-house. It has cabins forward and aft with adjoining lavatories. There are sleeping accommodations for nine as well as a large galley. Power is supplied by the new 125 h.p. Kermath.

Colonial Yacht Club Rendezvous Set

In response to numerous suggestions that members of the Colonial Yacht Club get together more frequently during the yachting season in Long Island Sound, the following dates have been set for a general rendezvous and get-together twice a month: Second Saturday in each month, at Lloyd's Harbor. The fourth Saturday in each month, at Port Jefferson. All active boat owners are urged to attend these rendezvous where the fellowship of the club may be enjoyed.

Boating on Arctic Waterways

(*Continued from page* 54)

settle with the legitimate owners in the event of the loss of their property was not discussed. Difficulties of that kind, like the rapids, would best be met and dealt with as they arose. In a case of this kind possession was of much more importance than ownership. My only anxiety was to get away before any really insuperable obstacle interposed.

Never was expedition planned and started with greater dispatch. My small camera and a compact volume of Mackenzie's journal were already in the capacious back-pocket of my mackinaw. A bailing bucket, tracking line and some tallow for stopping leaks were borrowed from a canoe on the bank; also a maple-syrup can which contained something that smelt like lubricating oil. Some trout Mike had brought across to sell at the post were left in the canoe. One shove and we were off.

Before I had solved the highly technical problem of adjusting the whiskey-still-worm-fed carbureter so it would not flood the cylinders we had been swept down a couple of hundred yards and stranded against a gravel bar. From here Mike waded ashore and borrowed a paddle and pike-pole from another beached canoe. When I suggested he had better make a list of his borrowings to facilitate their return to the proper parties, he grinned and said it would not be necessary. For one thing, he elucidated, he had a very good remember, and, for another, we might lose 'em all anyhow, and then all the trouble of making the list would be wasted. I was beginning to like the boy.

After cleaning the spark-plugs and a little further humoring of the carbureter the motor started with very little trouble. The wheezy pop of the explosions was almost drowned in the clinkety-clank of warring parts. No crusading insurgent on the floor of Congress ever fathered more lost motions than did that amazing conglomoration of squeals within wheels. There was not only lost motion between the loosely tied, screwed or welded parts, but the funny Box 'o Tricks itself was stultifying a deal of its surviving energy by the way it buck-and winged on the crude babiche-lashed frame on the stern of the Petersboro. Yet there was still enough power left to swing the canoe around and make substantial headway against the turbid foam-flecked flood that came surging down from the rock-fanged jaws of the great gorge above.

There is no really broken water in the channel immediately opposite Hudson's Hope, yet withal there is a weighty heave and hurl to the surge swinging out of the Canyon and straightening away for its less turbulent and more sedate meander to the distant Arctic. It is the innocuous-looking kind of water that tempts men to take liberties with it that they would not take with broken tumbling rapids. And so they tell of many upsets at the Hope, most of them the result of the overloading or careless handlings of canoes. All of these have been accompanied by the loss of outfit, many of them by the loss of life.

As I headed my ramshackle shallop up toward the foot of Rocky Mountain Canyon I must have run it at some point directly across the spot where such an accident came within a hair of putting a tragic end to the expedition of Captain William Francis Butler and thereby depriving Britain of a man who was to become one of her ablest soldiers and administrators, and the world of one of the finest books ever written on the Northland. Butler, after sledding up the frozen Peace as far as St. John, had come on to Hudson's Hope with packtrain to prepare for resuming his journey by canoe at the break-up of the ice above the Canyon. The trouble occurred in the course of an attempt to cross by canoe to the trading post which, in the seventies, was located on the south side of the river. Here, in the young soldier's own vivid language, is the account of what happened.

"We had scarcely left the shore when the canoe lurched quickly to one side, shipping water as she did so. Then came another lurch on the other side, and I knew all was over. I heard the men on the shore shouting for the miner to sit low—to keep well down in the canoe—but all was too late. There came another lurch, a surge of water, and we were over into the icy quick-running river. I could not free myself from the thwarts which held me like a vice; the water gurgled and rushed around, about and above me; and the horrid sensation of powerlessness, which the sleeper often experiences in a nightmare, came full upon my waking senses.

"Of struggling I have but a faint recollection; at such times one struggles with a wild instinct that knows no rule or thought; but I vividly recollect the prevailing idea of being held head downward in the icy current in a grasp which seemed as strong as that of death. . . . How it came

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Boating on Arctic Waterways

(*Continued from page 74*)

about I cannot tell, but all at once I found myself free; I suppose some struggle wilder than the rest had set me free, for long afterwards one of my legs bore tokens of the fight. In another second I was on the surface. I grasped the canoe, but it was round as a log, and turned like a wheel in the water, rolling me down each time, half-drowned as I already was.

". . . One look at Kalder and Charette on the ice told me that they were both utterly demoralized: Kalder had got behind Charette, while the latter held the line (to the canoe) without well knowing what to do with it. Perhaps it was better that he did so, as the line was a miserable frail one, and the weight upon it now in the srong current was very great. Very slowly Charette hauled in the line that held us to Mother Earth; then Kalder recovered his presence of mind and flung a leather line across the upturned canoe. I grasped it and in another instant the bark grated against the edge of the ice. Numbed and frozen I drew myself on to the canoe, then on to the crumbling ice along the edge, and finally to the solid pack itself. Wet, water-logged, numbed and frozen, we made our way across the ice to the shore. My gun and revolver had vanished; they lay somewhere under twenty feet of water."

It is a truism of river philosophy that most of the menace is in the unexpected—that the dangers one prepares for rarely bring disaster. So it is a salutary thing to know of the troubles of the man who has preceded you—if you know he is telling the truth, that is. Local versions of disaster are inflated by local pride, and one learns after long experience to discount them from one hundred to one thousand per cent, according to who passes them on to you. But when the plain and comparatively unvarnished tale of a blunt soldier like Butler leaves you with "the feeling that he really had a nearer squeeze than he would have you believe, it is time to tread softly.

Because Butler's story, which I had read but a few hours previously, suggested that there was more kick than one might expect in the water opposite the Hope, I discreetly shut my clattering motor down to half-speed as the nose of the canoe touched the edge of the undulant hard-running tail-race where the flood from the Canyon shot past the eddy under the jutting point just above the landing. This softened the jolt of what would have been a stinging solid impact at full-speed, and so there was only a dished-in bow from the blow where the disintegrant old canoe might otherwise have folded up and gone to sleep like a flower at dusk.

With a snicker of pure ecstasy that revealed him to me as a real river-rat, Mike restored the impaired contour of the bow with a prod of a knee on the sagging ribs, plugged an incipient leak with the head of a Dolly Varden and then made rainbows in the ambient air with his fast-flipped paddle as he helped me drive the half-swamped derelict through the eddy and up alongside a rocky shelf at the foot of the cliffy north bank.

Convinced that my high canyon adventure was both figuratively and in fact upon the rocks so far as further progress by water was concerned, I began scanning the towering walls ahead with a view of pushing reconnaissance by land. A climb to the rim for orientation was plainly the first step indicated, and with that in view I turned to ask Mike if he would be able to carry on salvage operations and line the wreck back to the landing alone. But I had failed to reckon with the riverishness of Mike's rattery; or perhaps I should say the rattishness of his rivery.

In any event, the idea that we were going to let a little thing like a stove-in bow drive us from the river seemed never to have entered the boy's tousled head. He had already scrambled along the bank to the landing and at the moment I picked him up with my glass appeared to be engaged in dragging down to the water the only one of a bunch of a half dozen canoes that was fitted with a stern-frame to carry an outboard. Checked in this high-handed raid by the irate owner of the pirated craft, Mike embarked without hesitation upon what looked like a series of petty pilferings from every unguarded boat along the shore. Five minutes later, bent almost double under a bale of assorted beach-combings confined in a section of fish-net, he came clambering back along the foot of the cliff.

"Me fixum good," the grinning pirate announced glibly, throwing down a pile of junk big enough to build a battleship with and starting to drag the leaking canoe out on the level shelf. Lacking the heart to discourage so pathetic an eagerness to be helpful, I lent a hand in emptying the wobbly shell of the old Peterboro. I could put in half an hour following Mackenzie up past the Hope and into the mouth of the canyon, and if this Imp of Darkness could wave his magic

(*Continued on page 78*)

IT is night. Your boat is riding at her mooring with no one on board. A leak starts unexpectedly from the stuffing box or an opened seam. There is no danger, however, because your Oberdorfer Automatic Bilge Pump is always on guard in case of emergencies like this. It automatically bails the water out until you have time to stop the leak.

A new model "B" Oberdorfer Automatic Bilge Pump not only protects your boat but saves you all the trouble and bother of pumping bilge. Imagine the pleasure of having your boat *always* bailed out and shipshape.

It operates on a 6 or 12 volt storage battery. The current consumption is low. Capacity up to 350 gal. per hour. Automatic or constant action as desired from a small switch near helm. Cannot clog. Height 10". Easy to install. Price $25.75.

The Oberdorfer Hand Bilge Pump is recommended where current is not available and as an auxiliary to a motor driven pump.

Oberdorfer Motor Driven Pumps, both gear type and centrifugal type, are used for deck flushing, galley and lavatory water supply, emergency fire use, etc.

Oberdorfer Bronze Gear Circulating Pumps are made in standard sizes, types and forms for any marine motor or converted automobile engine.

Send for complete bulletin.

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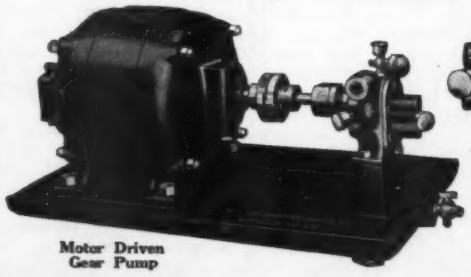
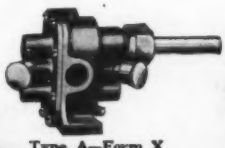
The New Model "B"
Oberdorfer Automatic Bilge Pump

Hand Bilge Pump



Motor Driven
Gear Pump



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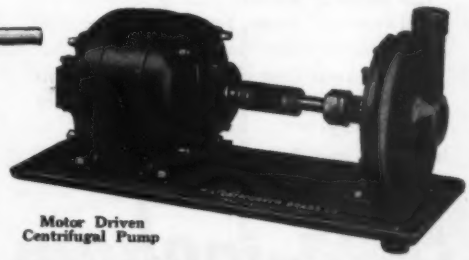


Motor Driven
Centrifugal Pump

Oberdorfer Pumps

Boating on Arctic Waterways

(*Continued from page* 76)

wand and materialize a reconditioned canoe in the meantime, so much the better. It would have been a pity to give up the fight with that synthetic outboard still intact.

Mike's wand of magic was raised on high. Thumbing Mackenzie's log, I was dimly aware that the occult implement was descending in rythymic beats upon what might have been a primitive tom-tom. A muttered incantation throbbed upon the air, and my nostrils twitched at the acrid odor of a pungent incense. Leaving Mackenzie for a moment and focussing my attention upon the pagan rite at my elbow, I discovered that my precious imp was splitting off thin gleaming white wedges from a block of aromatic spruce. And as for the incantation, a cocked ear, adroitly hand-cupped, presently resolved that into an interminably iterated couplet which sounded suspiciously like,

"It anna gonta rain no mo, no mo;
It anna gonta rain no mo."

Then I, too, took a turn at muttering, but very low so as not to crab the magic. Mike was probably right about the continued fair weather, I admitted, but, just the same, if he really did get that canoe in floating condition again he was letting himself in for such a wetting as no man ever got from a rain-storm.

(*To be continued*)

The Amateur Boat Builder

(*Continued from page* 48)

A half template is made for the transom, or the expansion originally drawn on heavy paper and cut out with a knife as suggested for the stem. It will be found more convenient to use a paper template in this case as it must be reversible, in order to line out both sides, and the butt blocks of a wood template will be in the way. Moreover, it is easier to bend the paper around the curve of transom. Mark on this template the position of the water lines and buttocks as bevels will be applied at these points when making the transom.

(*To Be Continued*)

More Than Half the Motor Boats on Atlantic Coast

More than half the country's smaller motor boats are concentrated in eight large cities along the Atlantic coast, according to a census of smaller working and pleasure craft in the United States on January 1 by the Bureau of Navigation, made public by the Department of Commerce. The census checked up on all pleasure boats under 16 tons and working boats under five tons operated in whole or in part by machinery.

Out of 222,254 motor boats in the entire country including Alaska, the Philippines and Porto Rico, 123,136 are concentrated in eight cities on the east and southeast coasts: New York City, Tampa, Fla., Baltimore, Portland, Me., Philadelphia, Boston, Norfolk, Va., and New Orleans. Six of these cities, Portland, Boston, New York, Philadelphia, Baltimore and Norfolk, along only 600 miles of coast, have 93,441 motor boats, almost a half the total. The entire Atlantic coast, from Main to Texas, numbers 147,048.

The Pacific coast, including Alaska, has 25,746 motor boats, little more than half the 49,206 located in the interior. Honolulu registers 712 such boats and San Juan, Porto Rico 161. Juneau, Alaska, has 3,729, almost half as many as Seattle which with its 7,721 has more than any other city on the west coast.

New York City alone has more smaller motor boats than the entire Pacific coast, fully 28,962 being registered there. Tampa, Fla., has the next largest number with 18,155 motorboats, and Baltimore is third with 15,018. Detroit, with 10,424, is the only city not on the Atlantic coast of the nine cities in the United States exceeding the 10,000 mark. The five others have about 12,000 each. New York State also outnumbers all other states in its motor boats. Together with 1,563 in Buffalo on Lake Erie, 3,414 in Ogdensburg on the St. Lawrence and 2,885 in Rochester practically on Lake Ontario and New York City, New York totals 36,824.

The census shows a rapid increase in this class of motor boats. Since 1919, when they numbered 110,791 they have doubled to the present total. Tampa, Fla., shows fairest increase of any city.

Advertising Index will be found on 3rd last page

Order Your Universal Motor *NOW!*

Travel *instead of* "Tinker"

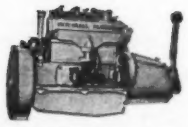
YOU who thought your old motors would do, but are tired of tinkering instead of traveling, tired of poking along instead of getting the big thrill the modern motor can give; and you who thought you would wait another year to get your motor and boat—now is the time to order your Universal.

The best days of the season are just ahead. So, why wait—why not start to enjoy now the pleasures you look forward to next year.

A Universal motor on your boat offers a bigger dividend in pleasure than any investment you could make. Thrilling speed. Freedom. Real fun, real relaxation away from the motoring throng.

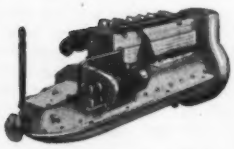
We have anticipated the tremendous demand for motors in this rapidly growing field of pleasure and recreation with our big, new factory—considered the largest and finest equipped marine motor plant in the world. Because of this you will find your Universal dealer in a position to give you prompt delivery on the most famous marine motors built—Universals.

Write today for catalog and name of nearest dealer.



FLEXIFOUR $295 AND UP

World's most popular 10-15 H. P. marine motor — for years has set the pace in its class for power, lightness of weight, sturdiness, compactness, dependability, economy of operation.



UNIVERSAL SIX

80 H.P. only 550 lbs. with 10 outstanding features never before combined in a marine motor. Model "VM" $695; Model "VH" $750.

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Universal

1-4-6-8 CYLINDER MARINE MOTORS

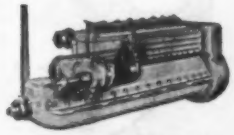
Built Expressly For Boats

All direct Universal motors are available with the built-in Universal Silent Reduction Drive in either 2¼ to 1 or 1¾ to 1 reduction ratios.

Drive *instead of* "Dream"

SUPER-FOUR

G.L.R. 50 H.P. 151 Class, $625. Delivers 40 M.P.H. and better on hydroplane. G.L.H. 45 H.P., $595. Delivers 30 M.P.H. and better on light runabouts. G. L.S. 35 H.P. $545. Finest all-purpose motor for medium speed runabouts and light cruisers.



UNIVERSAL EIGHT

110 H.P. only 670 lbs. A triumph in marine motor engineering—far ahead in design and construction. Model "SM" $895; Model "SH" $950.

The Crosbys of Cape Cod

(*Continued from page* 34)

first centerboard he'd ever seen. I think it was up New York way, an' he probably mentioned it to his sons. He was then usin' leeboards for beatin' through the narrows off here.

"Grandfather died when my father, Horace, was thirteen, an' when uncle Worthington was sixteen. Within a few months the two boys decided to build a boat. Of course they'd absorbed some knowledge of how to go at it from hearin' their father talk, but they hadn't had any actual experience; I believe Grandfather's last coaster was built several years before he died when his sons were pretty young.

"It was winter time when father and uncle began agoin' into the swamps around here to get the timbers. They picked oaks that were naturally bent just the right way, 'cause they'd never heard of bendin' timbers with steam.

"They knew just about the kind of boat they wanted, something about eighteen feet long, staunch to go offshore, and quick in the eye of the wind. Naturally she had to be shoal draft, and they thought they'd try to build one of those centerboards they'd heard their father speak about. But they didn't know how to go at it.

"They'd always consulted their mother about everything, even their fishin', especially since their father died. They went to her and asked her if she thought a centerboard would work in the kind of boat they were planning. She didn't say a thing at first, but just looked and looked at her little sewing stand. When the stand began to rock and to shake she said, 'Yes, boys, a centerboard would be all right'.

"You may laugh, an' say I'm losing my mind, in my dotage an' all that. But every time those boys were in difficulty with that first boat they'd go to their mother an' she'd consult that little stand of hers. If the stand rocked it meant, 'Yes, go ahead,' an' if the stand didn't move it meant 'No, you're on the wrong track.' They believed that their father was directin' them through their mother. They believed it, an' she believed it, an I believe it."

There was no mistaking the sincerity of Captain Crosby's ringing voice and his slightly moist eye as he enunciated the Crosby creed that the first catboat was really designed not by Worthington and Horace Crosby but by their dead father, the sea captain who had first dreamed of centerboards for Cape Cod waters. When the boys found themselves in difficulties these were solved by that ancient Cape Cod ouija board. Thus, for instance, they learned in the nick of time to correct an error which would have given their boat three quarters of an inch more of her beam on one side than on the other. "That wasn't much, but they corrected it, as we correct even an eighth of an inch error today."

"At last they got her finished and found they had a beauty, better'n they'd dreamed of. She was as quick and nimble as a cat, so they called her a catboat, an' that's how the name started."

This first boat, by the way, was in service about forty years. For some time the ribs of her successors were chosen the same way, that is from the swamp, with the crook in them as they grew. Steam was not adopted in the first Crosby boathouse until a decade or two later.

That first cat was about half as wide as she was long, and this principle as to beam has ever since been a cardinal rule with the Crosbys and their imitators. Catboats up to twenty feet in length will have just about half as much beam as length. Over twenty feet the beam does not increase at quite the same ratio as the length, yet a twenty-five footer usually has eleven feet or eleven feet six of beam. Thirty foot cats have been built and even larger, although in the latter case while the hull is essentially catboat the tendency is to rig it as a cat-yawl.

It has long been my contention that a Crosby cat will go to sea with anything that floats. Indeed I have seen my father's old twenty-footer, "Sheldrake," blithely carrying her three reefs in the open ocean southwest of the Elizabeth Islands when there was not another rag in sight except a little piece of cloth on a racing schooner, hove to. Last winter another Crosby boat was caught in the Atlantic east of Cape Cod in a blow which forced yawls and schooners to heave to and pray, but this Crosby offspring carried her three reefs right along to Cape Ann. All skepticism of your devotees of deep draft to the contrary notwithstanding the Crosby cat can take it. She is built to sail in wading water when that is necessary but she is no ditch crawler by necessity when the wind blows.

There are obvious disadvantages about the cat rig, especially on a large boat. Perhaps the difficulty of handling the great mainsail, particularly before the wind, when the boat has a tendency to yaw, is the chief drawback, and may to some skippers more than offset the quickness of the boat in the wind's eye.

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The Crosbys of Cape Cod

(*Continued from page 80*)

But look at the hull! Bulky and clumsy the lover of sloop or yawl or schooner may declare with a sniff, but he cannot deny that there is power in every line, above all in that blunt, pugnacious semi-steamboat bow, which looks eager to face the nastiest weather that ever blew, and does it repeatedly. Let your critic but see a Cape Cod cat facing the combined onset of a heavy sou'wester and the dirty rips on Succonesset or L'hommedieu shoals and he will grant cheerfully that for doing the work which she was built to do the Crosby cat has never been equalled.

A proud thing it must be to belong to a family which originated and has steadily maintained and improved a useful and beautiful art—for no less than this is the construction of these sturdy Cape Cod packets.

The two founders each left three sons, those of Worthington being Daniel, Joseph and Charles, and those of Horace being Herbert F., Manley and Wilton. Daniel and Joseph died not long ago. Daniel and Charles both built boats and Joseph was an oysterman. The male offspring of Horace have all erected their own shingled boathouses in the semi-circle of these structures on the eastern side of the channel between West Bay and Cotuit Bay. Herbert and Wilton now confine their activities in the family profession chiefly to giving advice to the third generation. Herbert's two sons do a good bit of building, but the greatest output of Crosby boats—cats, yawls, knockabouts and power cruisers—now comes from the group of boathouses controlled by Manley Crosby and his four sons, three of them being full partners with him. As for the members of the fourth generation—who seem too numerous to count—all are concerned with boats and the sea.

Manley has not changed much in the twenty-seven years since he built and swapped the "Sheldrake" for one of my father's Mason & Hamlin pianos. (Both boat and piano are still functioning.) He is the same tall, lean, powerful, sunburned man—adjectives, by the way, which seem to describe the typical Crosby, although not all are as tall as Manley. A few grey hairs are about the only indication in Manley's appearance that nearly thirty years have been spent since the "Sheldrake" slid down his ways. But then, as we lawyers, doctors, traders and scribblers will admit with ready envy, the building of boats in an environment like Osterville comes very near to being the perfect profession.

Cruiser on Dry Land Annoys Railroad

The proverbial fish out of water has always been the most helpless thing on earth, until recently when one kicked up quite a disturbance in Minnesota. The Elco Works of Bayonne was deliveringa fifty-footer to an owner who wanted it shipped to Rainy Lake, Minn. The boat was too large for the ordinary flat car so she had to be run over the inland waterways, up the Hudson, Erie Canal, across Lake Erie, up to Huron, St. Mary's River, and then the entire length of Lake Superior to Duluth. That water trip of 1,585 miles was comparatively uneventful for six days were consumed in making the final 180 miles of the trip.

Mr. Carter Burnett, who delivered the cruiser for Elco, hired a sand digger to hoist the cruiser from the water to a flat car. The boat then sat twenty feet above the road bed. That was all right until it was found that the cruiser would not pass through a tunnel enroute—a slight error in calculation which made it necessary to take the rails up, set them lower and start the trip over again.

Altogether, the railway company used three different special locomotives, cut the bearings from a flat car to lower the boat, and shunted the flat car back and forth between Duluth and the tunnel until the necessary clearance had been effected. And worse yet—the railroad lost money for the cruiser was accepted at a flat rate.

Equipment for Anything That Floats

The new catalog of E. J. Willis Company of New York is packed with one of the fullest lines of fine yacht equipment available. Stoves, De Luxe barometers, anything the yachtsman desires, can be found in it together with complete and interesting descriptions of all of it. And especially outboard fittings. It will be recalled that Mr. W. E. Willis as secretary of the New York Outboard Association is in a position to be well abreast of the times in the matter of outboards and that the company is making a specialty of equipment for outboard boats, racing and otherwise. E. J. Willis has equipped a great many of the well-known outboards with their hardware and the company welcomes any opportunity to be of service to outboard fans.

Advertising Index will be found on 3rd last page

Stands the Gaff because *built for Marine Use*

IN fitting out for a season's enjoyment on the water, be sure your engine is "set to go" with *the right spark plugs.*

Be sure to get the type recommended for your engine.

High speed, high compression marine engines operating at high temperatures, as well as for outboard engines in racing trim—*AC Type "AM" ⅞" Regular Marine, or Type "GM" Metric Regular Marine.*

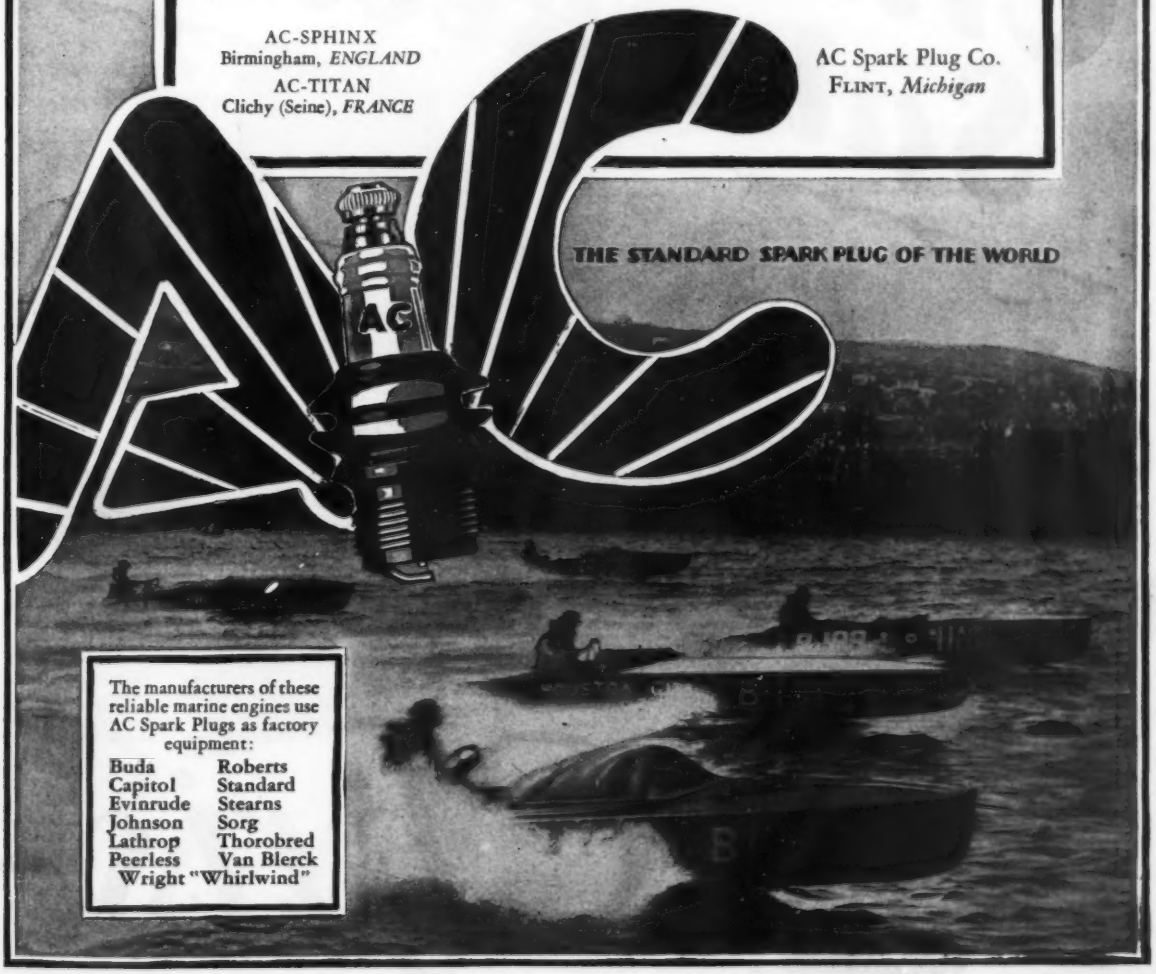
Boats equipped with automobile engines, operating at fairly high speeds, compressions and temperatures, as well as outboard engines for cruising speeds—*AC Type "Y" ⅞" Semi-aircraft or Type "N-1" Metric Semi-aircraft.*

Slow speed, large bore marine engines, operating at ordinary compressions and temperatures—*AC Type "Q" ½" Long; AC Type "A" ⅞" Regular, or AC Type "G" Metric Regular.*

For unfailing performance under all conditions, ask your dealer for AC Spark Plugs. They are available everywhere. Like other AC products, they are *proved by every test standard of the world.*

AC-SPHINX
Birmingham, *ENGLAND*
AC-TITAN
Clichy (Seine), *FRANCE*

AC Spark Plug Co.
FLINT, *Michigan*



The manufacturers of these reliable marine engines use AC Spark Plugs as factory equipment:

Buda	Roberts
Capitol	Standard
Evinrude	Stearns
Johnson	Sorg
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Wright "Whirlwind"	

AC SPARK PLUGS AC SPEEDOMETERS AC AIR CLEANERS
AC OIL FILTERS AC FUEL PUMPS AC GASOLINE STRAINERS

24-foot Chris-Craft with one-man top. This top, at slight extra cost, can be obtained on all open models.

Chris-Craft Sales Records—

Chris-Craft Deluxe Cabin Sedan, a new all-weather boat with all-mahogany hull and cabin built as an integral, stream-lined unit.

11 Models $2235 to $9750

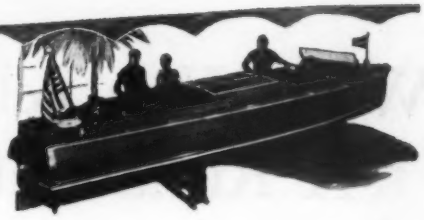
Chris-

WORLD'S LARGEST BUILDERS OF ALL-MAHOGANY

Advertising Index will be found on 3rd last page

Smashes All

Deliveries and Unfilled Orders Greater Than Ever Before in the History of The Company



Nation-wide dealer representation makes it possible for you to inspect and ride in a Chris-Craft before you buy it.

Day after day . . . week after week . . . month after month . . . Chris-Craft continues on its record-breaking wave of popularity! As the world's largest builders of all-mahogany motor boats, Chris-Craft is setting a terrific pace. Sales for the first *five* months of this year are 25% greater than for all of 1927.

It's a Chris-Craft year! Standardization and volume production have done the same thing to motor boat values that they did to automobile values. Values are higher than ever before. Prices are lower. No one any longer need deny himself the enjoyment of a Chris-Craft! Hundreds have bought and more are buying every day!

Even with a 24-hour schedule, the 56-acre Chris-Craft factory is unable to keep up with the demand.

Order your Chris-Craft *now* if you want early delivery. Eleven magnificent models await your inspection. There's a dealer near you to give you a Chris-Craft ride. Mail the coupon for his name if you do not know him.

CHRIS SMITH & SONS BOAT CO.
387 DETROIT ROAD · · ALGONAC, MICHIGAN

$2235 to $9750 *22 to 30 Feet—30 to 45 Miles an Hour—82 to 200 Horsepower.*

Craft

MOTOR BOATS

MAIL THIS COUPON TODAY

CHRIS SMITH & SONS BOAT CO.
387 Detroit Road Algonac, Michigan

Gentlemen: Please give me the name of your nearest dealer.

Name _____

Address _____

City and State _____

Protects the Oil Film

(*Continued from page* 41)

The thermometer people have done their part, too, providing instruments for every requirement—fairly priced, sturdy and dependable. Some are of the cylinder block, jacket, or header. They cost as little as $2.50. Or one can pay several times that sum and secure distance-reading, scale-dial types, mounted on dash or instrument panel, with flexible tubing leading to pipe-tapped connections at the motor. Instead of degree calibrations, dials are often marked off in sections, such as Freezing, Cool, Good Average, Danger, and Boiling. Some new models of the simple types, as featured on automobile radiator caps, are directly lighted by a small pilot light. Others have an integral thermostat to flash a green light for normal temperatures and a red light when overheated. The safest types register water jacket heat, even when there is no water in the system or when it is too low to circulate.

The old idea of lubrication, that crankcase oil was all right as long as there was plenty, is not accepted nowadays. Oil filters have come, to make it last longer and remain clear and full-bodied, and oil coolers have been developed to prevent the carbon deposits, sludge, and water vapor that result when cylinder wall heat runs up near the flash point of the lubricant. These devices in no way interfere with the desired quick warming up and thinning of the oil on starting the motor. As marine motors are seldom used in freezing temperatures. such conditions are not as critical as in motor car engines. The oil cooler may be simply an inbuilt condenser with fine tubes or fins or a ribbed flange around pump or crankcase bottom. Large, projecting breather pipes and lowered valve cover plate, the latter serving also as carbureter intake cleaners, help keep motor oil cool.

Although lower cylinder wall temperatures range around 300 to 400 degrees, the bulk of the oil in crankcase, pump, or piping is seldom much over 100 degrees. A clogged line, tight bearing, or extreme friction anywhere may soon raise that, but a distance-type thermometer, connected to crankcase or oil line between pump and filter, indicates the rise in time to save trouble.

These heat gauges for the heat film of marine motors augur no fool-proof millenium of boating; they merely simplify factors of personal caution.

D. McC., Cleveland, O.

Maintains Engine Efficiency

EACH engine manufacturer designs his product to be run at a certain temperature. Any user of a combustion motor knows perfectly well that a motor will not function properly when it is cold. Neither will it operate as it should when its temperature is abnormally high.

It can be seen that there is a certain temperature at which a motor will operate to the best advantage and while manufacturers plan to have some sort of stove device to heat the incoming gas and a cooling system to keep the motor temperature down, there are conditions which now and then will render void or nearly void the intentions of the maker, incidentally the plans of the operator.

Herein the operator of the motor steps largely into the picture. Upon his knowledge and ability depend the life and the efficiency of the motor. The manufacturer does not guess in his deductions regarding his motor, neither should the operator guess as to whether or not his motor is operating as it should. It is possible to operate a motor by guess work, but eventually the inevitable happens.

Heat is an important condition in the working of a motor. A hot spark, a hot spot in the intake manifold, a warmed up motor are terms that one hears repeatedly. The very name thermometer means a measure of heat, why then rely upon guesswork when a thermometer will eliminate guesswork?

A thermometer in the oil system will warn against excessive heating of the oil. All oil when heated becomes thin and loses much of its lubricating qualities, which means added friction and wear on all moving parts.

The thinning of the oil works another havoc—it breaks down the oil seal which should exist around the piston rings and as a consequence some of the power of the explosion is lost, which is another way of stating that power is lost and gasoline wasted.

The overheating of oil tends to carbon deposits. Carbon deposits will cause scored cylinders and scored cylinders bring along with them a score of kindred ills.

The overheating of the oil presupposes the overheating of the motor itself, a condition which leads to undue expansion of the metals in the motor, a condition which works havoc with those moving parts which have clearances measured in the thousandth parts of an inch.

(*Continued on page* 88)

Spend Your Summer Afloat in a Fast DODGE *Runabout*

$1595
$3265
$7800
f.o.b. Detroit

DODGE builds the real Vacation Runabout . . . Plenty of speed . . . Lots of action . . . Positive dependability . . . Perfect maneuvering qualities. Dodge builds super performance into its three genuine mahogany runabout models . . . Builds utility—builds safety—builds durability in fine hulls that challenge comparison. Each model is designed and priced to serve the family of modest income—or the sportsman whose one demand is stirring performance — regardless.

Dodge Runabouts are built in 20 foot, 26 foot and 30 foot sizes. Illustrated circulars or demonstrations on request.

HORACE E. DODGE BOAT WORKS, INC.

562 Lycaste Avenue • Detroit, Mich.

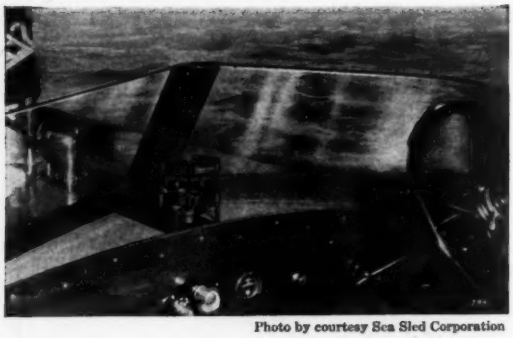


Photo by courtesy Sea Sled Corporation

Maintains Engine Efficiency

(*Continued from page* 86)

One could go on at length in discussing how heat can make and unmake a motor, but enough has been said to warrant one to know, not to guess at the temperature of his motor. It is true that most anyone can detect a motor that is overheated, but when that condition is reached harm has already been done. The thing is to detect the overheating in its beginning and that can only be done with any degree of consistency by the use of a thermometer.

Not only a thermometer in the oil line, but one in the exhaust water pipe. A rise in temperature beyond that usually reached means that one or all of the following conditions are operating: 1. Oil is thinning out and will have to be changed shortly. 2. That the timing may be incorrect. 3. Incorrect spacing of spark plugs points. 4. Clogging of the water pump or the oil pump line. 5. Water jacket filling up with rust. 6. Too high a grade of fuel being used.

When the readings fall the following conditions will be produced: 1. Increased gas consumption to maintain normal power. 2. Oil will be sluggish—a dangerous condition in splash systems. 3. Cooling water supply needs to be cut down. 4. Condensation of water will develop rapidly.

Surely the above information, so vital in the operation of a gas engine, is desirable. The thermometer will be the operator's aid. If he keeps the exhaust water temperature over 135° F. and under 180° F all will be well. If he keeps the temperature of the oil as it returns to the sump in the neighborhood of 135° to 140° F. it will perform the work required of it and in addition will keep down the condensation of water within the prescribed limits.

J. E. M., Norwich, Conn.

A Summer of Week-End Cruises

(*Continued from page* 25)

I know of no more delightful anchorage along the whole north shore than this cove at Eaton's Point. Late in the afternoon a run can be made to Greenwich, Conn., putting guests ashore at the Indian Harbor Club and tying up there for the week.

From Greenwich, the following Saturday, the schedule should take in some Connecticut port to the north, with a run to Port Jefferson on Sunday. This port is about the North Shore limit for easy commuting back to New York, it being about a two hour train ride. There is no further Harbor until Orient Point, some 45 miles further down the coast and inside Plum Gut, where Greenport, Shelter Island and the Peconic Bays afford the finest yachting waters to be found in the East and I strongly recommend that if owner and guests are willing to undertake a three hours' train ride that this far end of the Island be included. I did not extend my cruising last year this far, but turned back from Port Jefferson and made a comparatively long jump to Glen Cove. On the above schedule this could be done on Sunday, July 29th, or on Saturday, if an early enough start can be made. Saturday, August 5th, can be spent at City Island with a run down the East River on Sunday to Gravesend Bay where several anchorages can be found in basins, fairly close to the B. M. T. subway. I would advise the inexperienced skipper to take the East River on a Sunday when the traffic is least. Use the east channel by Blackwell's Island and Buttermilk Channel (east side) by Governor's Island. My first trip by the Battery was taken when I was two weeks' experienced in running a cruiser, and the time was five o'clock in the evening of a Friday night in summer, with traffic at its peak. I stalled my engine twice in reversing and throttling and completely tied up the channel between Governor's Island and the Battery. I was told later by someone in the Barge Office that they thought Queen Marie had arrived from the noise of the whistling. I certainly gave two ferry boat captains a bad three minutes.

August 11th and 12th can well be spent in Jamaica Bay and the Rockaways. It will be easy to get back to the city, and the several clubs at Rockaway will assure the visitor every courtesy. The 18th and 19th can be spent going outside and putting in to Long Beach. There is a commodious anchorage in the Long Beach channel and the entrance to the Inlet is not at all difficult except in a considerable southeast and southwest blow, when none but the hardy want to go out anyway. This Lower New York harbor deserves the small boatmen's consideration if he is used to the North Shore, as it will roll pretty steep after a day or two of south winds.

(*Continued on page* 90)

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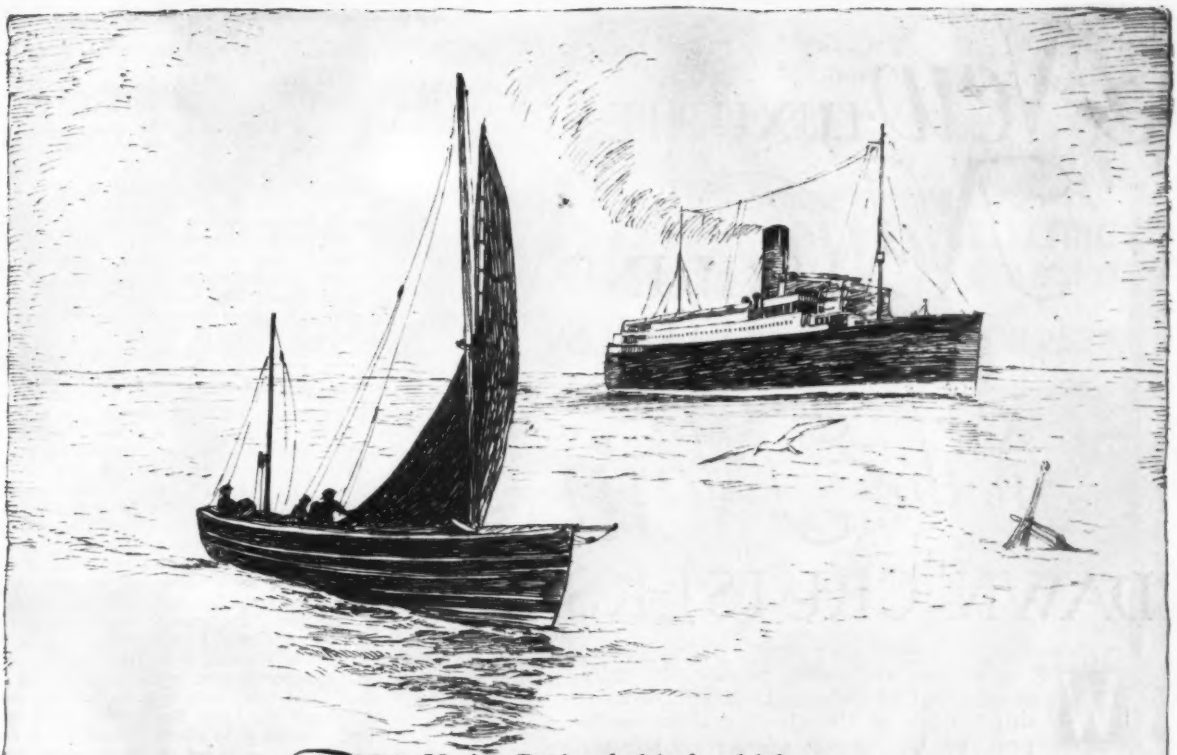

TEBO Yacht Basin, behind which are the entire resources of the Todd Shipyards Corporation, maintains an incomparable Service to owners of fine yachts in repair, reconditioning, overhaul and storage . . . Convenient owner supervision within fifteen minutes of lower Manhattan

TODD NEW YORK, U.S.A.

TODD DRY DOCK ENGINEERING & REPAIR CORPORATION

Foot of 23rd Street, Brooklyn, New York

A Summer of Week-End Cruises

(*Continued from page* 88)

On the 25th and 26th a thoroughly enjoyable trip can be made from Long Beach to Sandy Hook, anchoring either at Atlantic Highlands or inside the Hook. The channel into the Highlands is a bit difficult for a stranger but fifty fishing boats use it every day. If the boat is to be tied up for a week, it will be necessary to go into the Shrewsbury, but since it is only an hour's run or so back to Brooklyn, the evening of August 26th should see the skipper back to Gravesend Bay. Then he can leave bright and early Saturday, September 1st for whatever port he wishes to play in over Labor Day, and return home the 3rd, flying his coming home pennant. I have not taken him into Great South Bay, which is in many ways the ideal place for a cruiser to spend several weeks. The situation is unique. On the north shore of Great South Bay is a populous, suburban shore lined with splendid canals and ports where all supplies can be had, landings easily made and at a short distance from New York. Five to seven miles across the bay to the south is a desolate, unpopulated stretch of beach and sand dune that gives all the impression of a desert island. The skipper can do exactly as he pleases here for there is no one to object or criticise. There are no rocks or no tide rips and the water is seldom over six to eight feet deep. On the sea side of this forty mile sand strip is one of the finest sea beaches in the world without a person to be seen except at two or three resorts of a few hundred people such as Cherry Grove and Water Island. In places it is not more than two hundred feet from Bay to Ocean across the sand. One will be sure to go aground, however, or get the propeller full of weeds but these are difficulties easily remedied. Entrance to Great South Bay can be had by canal through Canoe Place and Quogue or by sea entrance from the south, through Fire Island Inlet. The latter involves a long outside passage from the Narrows. I understand that a boat of not more than four to five feet draft can get in by going through the Long Beach inlet but I have not done so. This back channel is in places difficult but it provides an excellent day's sport if one is not afraid of getting stuck in the mud and having to wait for the following tide. It obviates the outside track and Fire Island Inlet is no place for an inexperienced pilot with a good sea running.

This coming season I plan to extend my cruise to circumnavigating the Island using the inside passage from Plum Gut, that is, unless a fleet cruise is developed, which I must admit attracks me hugely, provided it is well disciplined.

LOG OF 1927 CRUISE

Refer to chart for key numbers of stops

Start—June 25th—Gravesend Bay.
1—June 26th—Bear Mountain and return.
2—June 26th—Colonial Yacht Club.
3—July 2nd—Bayside Yacht Club.
4—July 3rd-4th—Manhasset Bay Club.
5—July 10th—Seawahnaka Club.
6—July 16th—Northport—Independent Club.
July 24th—ditto—laid up for engine repairs.
August 5th—ditto.
7—August 6th—Greenwich.
8—August 7th—Port Jefferson.
9—August 14th—Glen Cove.
10—August 20th—City Island—Harlem Yacht Club.
11—August 21st—Gravesend Bay Yacht Club.
12—September 3rd-4th—Jamaica Bay.
13—September 10th-11th—Long Beach.
14—September 17th—Sandy Hook.
15—September 18th—Elizabethport.
16—September 24th—Hackensack River.
September 25th—Finish.

Shipbuilders Remodeling Plant

Since the reorganization a year ago, officers of the Pusey & Jones Corp. have been formulating for general improvements throughout the plant, with particular attention given to the marine department. Contracts have been let for several new buildings which will replace obsolete structures rather than increase the size of the plant. Tools and machinery will be installed of the most modern type available, anad the work routed in a straighter line than is possible with the existing layout.

One of the important plans carried into effect by the corporation was the buying of about seven acres of land on the south side of the Christiana River opposite the plant. The purchase of this land protects and extends the facilities of the launchiing ways by removing interference on the opposite side of the river.

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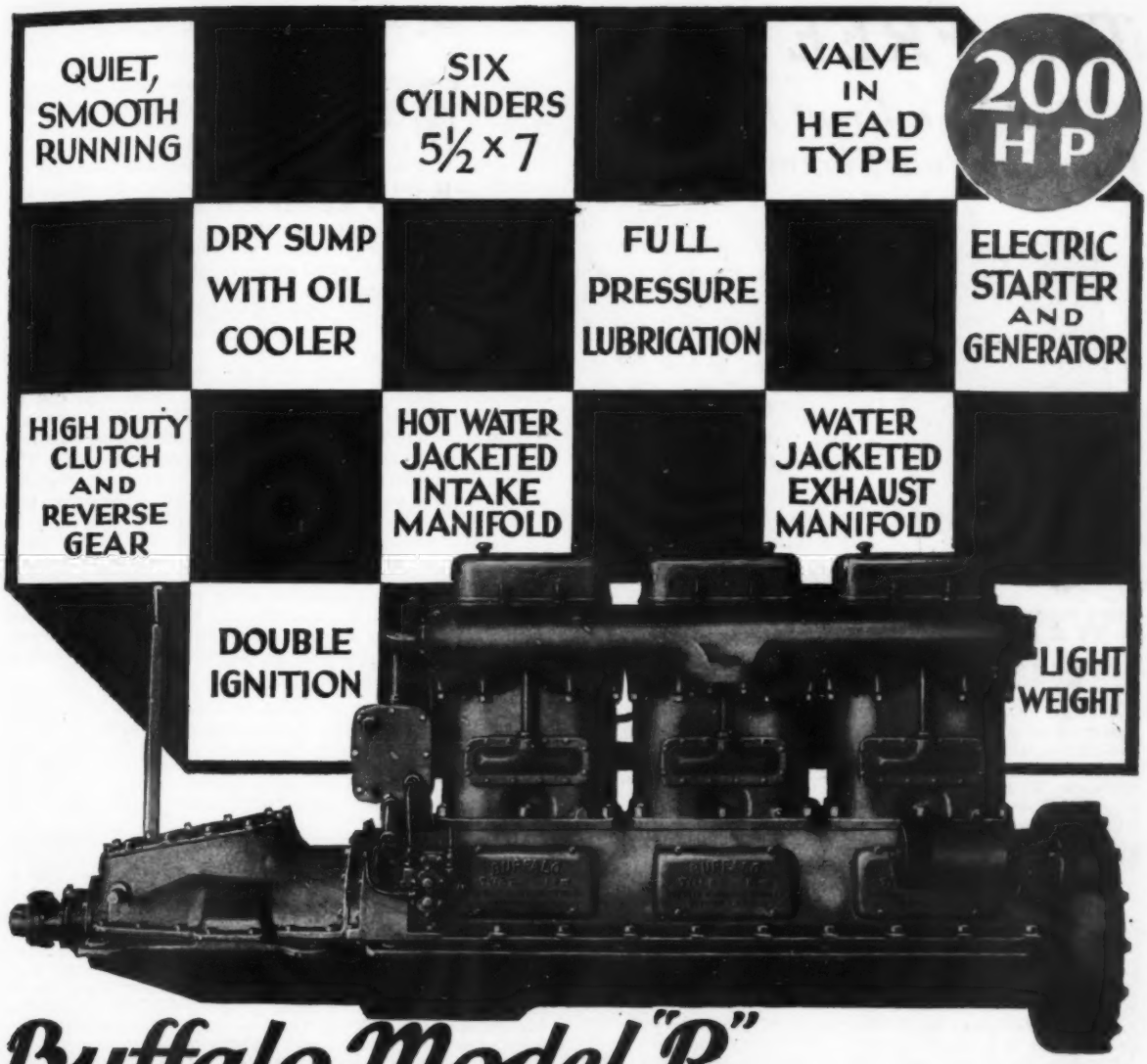


Buffalo Model "R"

$2200

Proven performance in boats of highest quality, the latest in design, the best of construction, and now this new low price, combine to make Buffalo-Model "R" outstanding engine value. Write today for full information.

BUFFALO GASOLENE MOTOR CO.

1274-1286 Niagara Street, Buffalo, N. Y. New York Office—347 Madison Avenue

Big Stepper, A Racing Hydro

(*Continued from page 36*)

together at the stem by a breast hook and to the transom at the stern by brackets. At the point where the engine is supported on the transom, reinforcing is provided which will distribute the effort of the engine through the hull. Waterproof marine glue is called for on all joints and builders should remember to follow the instructions of the manufacturers of these products in order to secure the best besults. A light canvas deck is provided over the forward portion of the little hull which will serve a good deal of the spray and water outside of the boat.

The lesser finishing operations will take place from time to time as the work progresses and the specifications and drawings will serve to tie the work together so that no steps will be omitted. For the finish a choice of several methods can be followed. The boat can be painted or enamelled or, if a bright finish is desired, the mahogany or cedar planking can be stained to suit and finished in several coats of good spar varnish. The specifications which follow will explain any questionable points which may arise as the work progresses and should be followed closely.

Keel: The keel to be of spruce ¾ inch thick by 1½ inches wide, properly beveled to suit planking and in two lengths, one running from the joint with the stem piece to the step at frame No. 6 and the other running from the step to the after end of bottom. Keel aft of step to extend forward of the step frame about 2 inches onto a knee and bolted through the keel forward of the step and with a galvanized carriage bolt, ¼ inch diameter by 4½ inches long.

Stem Piece: The stem piece to be of Rock Elm and in two pieces properly shaped, as shown in detail and bolted together with ¼ inch carriage bolts, beveled and rabbetted to receive the ends of the planks. To be fastened to keel as shown on plans and bolted to the keel with two ¼ inch by 2 inch galvanized carriage bolts. White pine stop waters or plugs to be put through the stem where the rabbet line crosses the joint in the pieces.

Transom: Transom frame to be of spruce ⅝ inch thick and 2 inches wide except the top piece, which is to have a depth of 3½ inches, fastened together at the corners wlth a small knee ½ inch thick. An oak stiffener ¾ inch thick and 10 inches wide to be installed on top of the frame as shown in details on plans, running the full height of transom and having under it a spruce fill in piece between frames, as shown in detail plans. Stiffener to be screw fastened to transom with 1¾ inch brass wood screws extending through transom planking and frame into oak piece. Transom planking to be ⅜ inch thick, of cedar or mahogany, screw fastened to transom frame with flat head brass wood screws, spaced not over 2 inches apart.

Frames: Bottom frames except No. 3, 4 and 5 to be of spruce ½ inch in thickness and 2 inches wide, sawn to shape and joined to the side frames with three copper rivets ⅛ inch in diameter by 1⅛ inches long in each side and screw fastened to the keel at their proper stations, with two 1¾ inch No. 7 brass wood screws in each frame. Side frames to be of spruce ½ inch thick, 1¾ inches wide at chine and 1 inch at sheer. Main frames consist of an assembly of side and bottom members and intermediate frames of bottom members only. Bottom frames No. 3, 4 and 5 to be ½ inch thick but to a depth of 4½ inches over the top of the keel for additional strength.

Chines: Main chine forward of step to be of spruce ¾ by ¾ inch reinforced at stem piece with a breast hook of mahogany ¾ by 3 inches. Main chine aft of step to be of spruce ¾ inch thick and 1 inch wide and to extend forward of step and be notched into side frame No. 5. Batten chine to be of spruce ⅜ by 1¼ inches and to be screw fastened to frames with one 1½ inch No. 5 brass wood screw with countersunk heads. All battens and keel to be notched through frames including transom, and extend for the entire length of the planking and to be well glued where they pass through transom. Main chine to be screw fastened to frames.

Sheer Clamp and Inwale: Sheer clamp to be of spruce ⅞ by 1¼ inches riveted to the frames with two ⅛ by 1¼ inch copper rivets in each frame and notched into transom knee and breast hook as shown on plans and fastened to same with ⅛ inch copper rivets. Inwale to be similarly fastened and to extend from stern to frame No. 5.

Seam Battens: Seam battens to be of spruce ¾ by 1¼ inches, screw fastened to stem pieces and frames using one 1 inch No. 7 countersunk head brass wood screw in each frame. All seams to be glued with Jeffries Marine Glue, C Quality. Entire frame

(*Continued on page 96*)

The Down-Easter

Fastest stock runabout built in New England

Two Special Down-Easter Mahogany Models

35 M.P.H. 80 H.P. Universal, "The Flying King"

$2195

Afloat at Camden

25 M.P.H. 40 H.P. Gray, "The Flying Prince"

$1895

Afloat at Camden

The world's greatest boat value

18 feet of lightning speed. Every inch of honest value and quality. Every mile guaranteed, not promised. Lifting rings for yacht tenders. Brass and bronze fastenings throughout. Finished like a polished mirror. The handsomest speed marvel afloat.

Immediate Delivery

This V-bottom double cockpit model has already created a sensation. A comfortable craft for five people.

DETAILED SPECIFICATIONS

DIMENSIONS

Length overall . . . . 18 feet
Beam . . . . . 5 feet
Draft, Extreme . . 18 inches
Freeboard:
Bow, 26 in. Stern, 18 inches

CONSTRUCTION

Frame—Keel and chines selected oak or yellow pine, stem natural crook hackmatack, frames oak, clamps and battens clear spruce. Engine stringers of spruce and ash, engine stringers 10 feet long set over frames and through bronze bolted.

Planking — Sides and bottom planked to seam battens with selected matched mahogany. All brass fastened and holes wood-plugged.

Joiner Work — Decking, hatches, coamings, transom, bulkheads and all exposed parts selected mahogany, all brass screw fastened and holes wood-plugged.

Varnishing and Painting — Interior of hull finished two coats lead paint, bottom three coats green copper paint, all mahogany filled and finished natural with four coats of best spar varnish.

Fastenings — Brass and bronze throughout.

Steering—Erico auto type steering-wheel. Cast bronze rudder.

Hardware—Special half-oval brass fender screw fastened. Bilge fender. Transom brass bound. Hatch hinges, piano type. All deck hardware of brass and nickel plated.

Power Plant—Gray Model "6-40," or Universal 80 H.P. pressure oiling system, electric starting, battery, shaft of Tobin bronze, strut cast bronze bored for flax packing, Hyde propeller.

Instruments—Full illuminated instrument panel, having tachometer, heat indicator, oil gauge and ammeter. Ignition and light switch, remote starter switch, special choke and cigar lighter.

Fuel System—Twenty-five gallon special gas tank under after deck, copper tubing to Auto-Pulse gasoline pump and carburetor.

Upholstery—Seat cushions spring type Russialoid covered. Lazy-backs upholstered.

Lighting — Electric lighted throughout, having one circuit to isntrument panel, one to running lights and one te motor compartment.

Equipment — Built-in windshield, two bow chocks, combination cleat and lifting ring forward, cable aft, combinatien mooring post light and flag pole socket, six fender cleats, two clam shell ventilators, two stern chocks, gas tank cap and cleat, stern flag pole and light combined, bow flag pole, ensign, anchor and line, tie lines, brass electric horn, two boat hooks, brass cigar lighter, two fenders, five life preservers, fire extinguisher, bilge bailer, hand searchlight, four step pads. Complete set tools.

Controls—Throttle and spark on steering-wheel, reverse lever located center cockpit.

Salt Water Equipped Throughout

Further details gladly furnished by addressing

SALES MANAGER

The Down-East Boat Corporation

Camden, Maine

From the Arcti

Advertising Index will be found on 3rd last page

to the Equator

Banfield "32"

"THE world's greatest sea boats" is not an idle description of Banfield Sea Skiffs. They have cruised under their own power from New York to the frigid Arctic and return, and even to South America. Banfield boats are popular wherever motor boating is indulged on both hemispheres. One owner reports a 17,000 mile cruise in less than a year.

The Banfield "32" is the fastest stock cruiser built today. Its thrilling 30-mile-an-hour speed and ease of control rival that of the finest express runabout. Its accommodations lack nothing in absolute yachting comfort. Superior sea-skiff design, over-rugged construction and fine workmanship bring to you in the Banfield "32" a boat in which you can place absolute confidence to weather the roughest blow as well as to give years of genuine satisfaction.

28-30 M. P. H. Powered with 150 H. P. KERMATH **$6,950.00**

You are invited to personally inspect this wonderful boat at the Banfield showroom nearest you, or write today for illustrated literature.

BANFIELD SEA SKIFF WORKS INC.

SALES OFFICES AND PERMANENT EXHIBIT

277 Park Ave. Bldg. - ENTRANCE 302 LEXINGTON AVE. - *New York City*

PLANT: ATLANTIC HIGHLANDS, NEW JERSEY

LARGEST BUILDERS OF SEA SKIFFS IN THE WORLD

BOSTON:
Savage Boat & Engine Co.
780 Commonwealth Avenue

LOS ANGELES:
1315 East 7th Street

CLEVELAND:
Lake Erie Yacht Brokerage Corp.
1374 West 117th Street

Big Stepper, A Racing Hydro

(*Continued from page 92*)

and battens to be faired and trimmed after setting up and given one coat of spar varnish before being planked.

Braces: Braces of spruce ⅞ by 2½ inches shall be placed as shown on the plans on frame No. 5 and No. 8. Stern braces of ⅝ inch O.D. No. 20 gage tubing to be installed by bolting to the transom near the top edge just out from the center enough to clear the motor stern bracket and the other end bolted to the side at frame No. 8, one bolt passing through the top end of the frame and the other through a block set between the clamp and the side planking. A tubular brace of same size to run from the top of Frame No. 8 down on to the bottom frame, as shown on the plans. At both sides of the opening in the bottom planking at stern for motor clearance, a mahogany bracket ½ inch thick, the after edge of which has a contour the same as the end of the side planying and fastened in place with a ¾ by ¾ inch spruce piece in the corner, formed by the bracket with the transom and bottom planking. 1¼ inch No. 7 brass wood screws to be used in fastening bracket in place.

A Real Race

(*Continued from page 32*)

by the Bayside Yacht Club to be sailed for annually, except as specified in paragraph three of this deed. The name of each yacht winning it, the name of her owner, his club and the year shall be suitably inscribed thereon. While the title of this trophy shall be vested in the Bayside Yacht Club, nevertheless the trophy may remain in the custody of the club represented by a winning yacht until one week prior to the start of the annual race but not after August 1st of the succeeding year, provided, however, that suitable guarantee shall be given for its proper care and return. In case the club having the custody of the trophy shall be dissolved or cease to exist the trophy shall thereupon be returned to the Bayside Yacht Club.

SECOND: This trophy shall be awarded to the Auxiliary sailing yacht making the best corrected time on time allowance in the Bayside Yacht Club's annual race from Bayside to and around Block Island and return, and known as the Bayside-Block Island Auxiliary Handicap.

THIRD: Should this race be won in any four annual events after 1926 by the same yacht representing the same club; or, should this race be won in any seven annual events after 1926 by any yachts representing the same club, then the trophy ceases to be in competition and becomes the permanent property of the club so winning it;

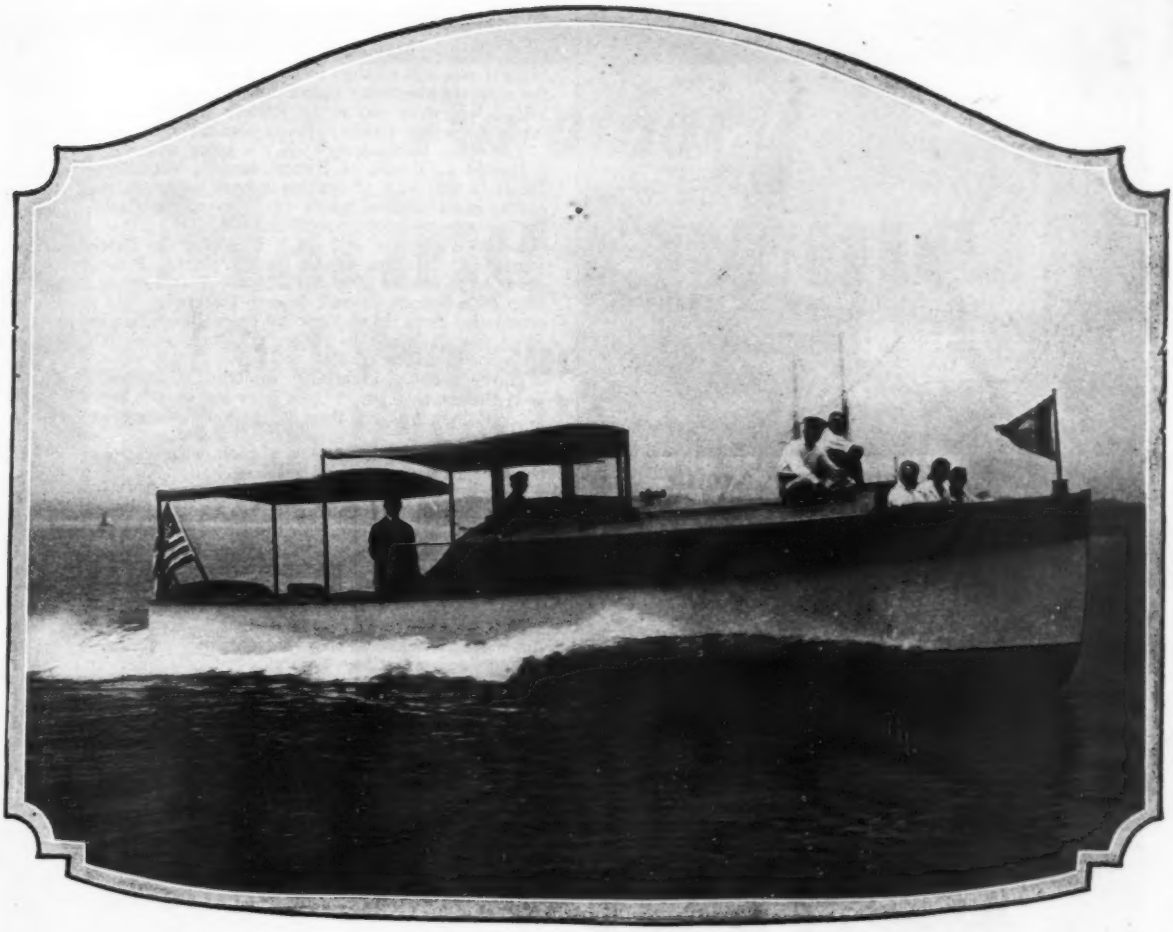
FOURTH: Races for this trophy shall be under the management of the Regatta Committee of the Bayside Yacht Club from whose decisions there shall be no appeal, and shall be subject to the racing rules adopted from time to time by the Bayside-Block Island Trophy Committee hereinafter established;

FIFTH: Races for this trophy shall be open to any auxiliary sailing yacht enrolled in a recognized yacht club complying with any conditions such as classification, size, tonnage, build-rig, ballast, equipment and crew adopted from time to time by the said Bayside-Block Island Trophy Committee;

SIXTH: The helmsmen of a competing yacht shall be Corinthians;

SEVENTH: The Bayside-Block Island Trophy Committee shall consist of Walter P. Groszmann, who shall serve for one year; Herbert F. L. Funke, who shall serve two years; John Johns, who shall serve for three years; Harry V. Spurr, who shall serve for four years; and Frank L. Stiles, who shall serve for five years. This committee shall elect its own chairman annually. At the expiration of the term of office of each member of the committee, the Board of Governors of the Bayside Yacht Club shall appoint his successor who shall serve for the term of five years. In case of the failure or inability of any member to serve, or should he cease to be a member of the Bayside Yacht Club, the Board of Governors of the Bayside Yacht Club shall appoint a successor who shall serve for the unexpired term;

EIGHTH: If for any reason at any time it should be deemed wise or expedient by the Bayside Yacht Club to discontinue this race before some club has obtained full possession of the trophy under the conditions set forth in paragraph three of this deed, the trophy shall continue as the property of the Bayside Yacht Club; and should that club ever cease as an organization or change its name or merge with any other club, the final disposition of this trophy shall rest with the Bayside-Block Island Trophy Committee from whose decision there shall be no appeal and whose functions will then end.



A Playboat—of course—and for this summer, too!

WHEN considering the purchase of a motor boat, yachtsmen would do well to carefully weigh these five important points.

1 ***Easy-riding***—With plenty of flare, well proportioned, well balanced, and correctly powered, the Playboat rides the water swiftly without jar, shock or vibration.

2 ***Safety***—The experience in building more than 3,000 boats covering a period of upwards of forty years insures safety and sea-worthiness.

3 ***Speed***—Playboats are powered with the famous 180 h.p. Speedway Engines, developing a range of speeds suitable for fast day cruising and fishing.

4 ***Flexibility***—For either northern or southern waters, the Playboat just seems to fit in—for slow speed or fast, for rough water or smooth. Quick turning with fast throttle response.

5 ***Possession***—We have three Playboats ready for this seasons delivery. You have an opportunity to secure one of these by making an early inquiry.

Let us send you blueprint, photograph and full information regarding our famous Playboat—to aid you in making your decision. Address your inquiry to

Consolidated *Shipbuilding* Corp.
MORRIS HEIGHTS, *New York*

Huck Goes After a Record

(*Continued from page* 33)

So if you will arrange to have a couple of bands on hand, and the mayor's welcoming committee and will wear a silk hat yourself, I will meet you at the Battery and you can show me the Aquarium where you has always been trying to send me.

The other Mountaineers what is going with me is as follows:

Harold L. Perrin of Boston, lawyer, and alleged yachtsman. He is in the habit of reading a book while steering a compass course in the fog, so maybe we stops on the Carolina coast for the summer while he is at the wheel.

Robert P. Breese of New York and Palm Beach, yachtsman, sportsman, cottillion leader and scientist. Breese says he is going to be aboard if he has to walk down here on foot. If we keep off'n bottom, he will deserve the credit. He has made the round trip from New York to Palm Beach in yachts, eighteen times, six of which he makes all alone, which it only goes to show he is a little cuckoo.

Harry Baldwin, yachtsman, capitalist, of Boston. Baldwin, he is in Europe as I writes these lines and doesn't know he is going yet. I doesn't doubt that he stays in Europe when he hears about it.

We also hopes to employ a cook what can cook when the boat it runs bottom up and get seasick

Henry Hower, president of Enterprise Oil Company, makers of the sure-slippery Duplex (what we is of course using), he handles all negotiations with the Coast Guard. In order to get their co-operation I has to promise to have no licker either inside or out on that there trip, which it is hard, you has to admit, Chap. So you will kindly have the name of a reliable bootlegger when I reaches New York, or you might bring him with you. Anyways, the Coast Guard, it is going to watch out for me in case I steps overboard en route and gets wet.

Now in closing Chap, I wants you to distinctly understand that I doesn't write this in no spirit of free advertising. Me and Gar Wood, we shuns publicity like a shrinking violets, we does. I wouldn't have this get into the newspapers, for nothing. The trip, it is entirely private, for my health, and of course, I is a bit interested to find out if the Fairform Flyer runs bottom up in a seaway or what, so just keep this quiet until I gets there, or not.

New American Outboard Records

(*Continued from page* 9)

record of 30.25 miles per hour was established by J. E. Wilkinson, driving his Cute Craft, Wilkie's Baby Cute Craft.

At San Diego, California, on April 22nd, Charles Holt, driving his Firefly in the 5-mile, Class C, Free-for-All race, established a new record of 34.48 miles per hour which beat the best record for this distance. However, Mr. Holt a few weeks later at Newport Beach, California, on June 3rd, startled the world by winning the One Mile Trials in Class C Amateur with a mean speed of 38.436 miles per hour. Mr. Holt's boat, Firefly, driven by himself, is a 14-footer built by F. Ashbridge and powered with a Class C Evinrude motor.

At Lake Elsinore, California, on May 6th, a 5-mile Class C Amateur record of 33.028 miles per hour was established by Miss Elsinore, owned and driven by Floyd Pierce. This boat is a 16-footer, Evinrude powered, built by Holt Bros.

At Long Beach, California, on May 20th, the 3-mile Class C Amateur record fell by the wayside when Black Maria II, owned and driven by A. Thompson, went three miles in competition in 5 minutes, 31 seconds, setting up a new record of 32.727 miles per hour. Black Maria II is a 13 foot 6 inch hull, built by F. J. Pierce. At Long Beach, Calif., also on May 20th, a new 1 mile competition Class C Amateur record was set up by Firefly, owned and driven by Charles Holt. A speed of 33.333 miles per hour was reported for Firefly with his Evinrude Class C motor.

At Worcester on May 29th, new one mile records for Class C, in both Amateur and Free-for-All Divisions were established by Evinrude powered Fairchild Aero boats of 12 feet 6 inches in length. In the Amateur Division, C. De Angelis drove his boat in the six one-mile dashes at a mean speed of 33.806 miles per hour and J. C. Smith drove his craft in the Free-for-All Division at a speed of 34.287 as an average for the six one-mile runs.

At Worcester on May 30th, new records were set up for 2 miles Class C in both the Amateur and Free-for-All Divisions. H. R. Maddocks, driving the 14-foot, Evinrude powered Baby Whale XIII, established a record of 32.876 miles per hour in the 2-mile Class C Amateur division. In the 2-mile Class C Free-for-All division, Mr. Maddocks drove his Baby Whale XIII around the course in exactly the same time, establishing the same record of 32.876 for this Class and distance.

(*Continued on page* 100)

New American Outboard Records

(*Continued from page 98*)

A 10-mile Class C, Free-for-All record was also established by Mr. Maddocks in Baby Whale XIII powered with an Evinrude. Mr. Maddocks' time for 10 miles at Worcester on May 30th was 18 minutes, 23 seconds or a speed of 32.668 miles per hour.

The best speed to date in Class D was established at Miami Beach, Florida, in the one mile Time Trials by Baby Wanderjax, owned and driven by Willard M. Ware. Mr. Ware in his Boyd-Martin boat averaged 31.08 miles per hour for the Mile Trials with his boat driven by an Elto Quad engine.

In Class E, which includes motors of between 40 and 50 cubic inches piston displacement, a one-mile trial record was established by the Johnson powered boat, Baby Whale XIII, driven by H. R. Maddocks. Baby Whale XIII, which was built by D. N. Kelley of Fairhaven, Massachusetts, averaged 35.022 miles an hour for the six one-mile runs.

The nineteenth American outboard record to be established this Spring was made at Lake Elsinore, California, on June 10th. The distance was 2½ miles. Class C, Amateur, and the record was established by Bonnie Lass, owned by J. F. Graham, a 16-footer, built by Holt Bros. Bonnie Lass' record was 34.749 mles per hour.

A complete summary of the new American records established to date will be found in the table on page 9.

West Coast Clubs Join A. P. B. A.

(*Continued from page 22*)

they did so much in the South to advance the sport that many other organizations in other sections took heed and started to mend their ways.

The Northern California Association made great progress also and after the leading organizations of the North and South got under way the movement became general. The clubs on the Pacific Coast that now belong to the A. P. B. A. are:

Northern Calif. Outboard Motor Boat Association, Pacific Inter-Club Yacht Association, Aeolian Yacht Club, Oakland Yacht Club, Sunset Yacht Club, Vallejo Yacht Club, Clearlake Outboard Club, the Pacific Coast Yacht Association, San Francisco Yacht Club, South Bay Yacht Club, Lucerne Yacht Club, California Yacht Club, Santa Barbara Yacht Club, San Diego Yacht Club, Southern Calif. Outboard Motor Boat Association, Lake Elsinore Yacht Club.

Over 75 per cent. of California is now A. P. B. A. and has taken a definite stand for sane and well organized racing. The balance of them are giving the most promising indications.

Net result: West Coast racing has started to boom.

The West has some of the best courses in the entire country and there was no good reason in the world why they shouldn't have walked away with a good share of the country's racing and racing records. A little housecleaning was all that was needed.

It should not for a moment be thought that the West Coast racing men and organizations were not themselves greatly responsible for the advancement of their own racing conditions. In fact, many prominent Western yachtsmen rendered valuable assistance to the movement among which were the various officials of the Pacific Coast Contest Board, of which Commodore Bobrick is chairman. This board at present consists of J. D. Zellerbach, Secretary Northern California District, Walter E. Burke, Secretary Southern California District, C. Willard Evans, of San Francisco, Timer and Measurer, William Plunkett of Los Angeles, Timer and Measurer, O. K. Hunsaker, also of Los Angeles, Timer and Measurer, Walter C. Howe of Alameda, Surveyor, Mathew Slavin, Jr., of Pasadena, Surveyor, and Commander W. Mack Angas of the Corps of Civil Engineers, U. S. N. Eleventh Naval District, San Diego.

Commander Angas, in particular, has done noteworthy work and has given a great deal of time to his work for the A. P. B. A. in surveying courses, timing, and making reports on the activities at San Diego. Readers will recall his numerous articles in recent issues of MoToR BoatinG covering the San Diego events.

It is obvious that no one else could effect the necessary changes but these men themselves and their local organizations, but it must be conceded that Commodore Bobrick did much to start the movement through his tireless efforts in waking up the various sections to their need of standard and sensible racing conditions. And his work in advancing the interests of the A. P. B. A. on the Pacific Coast can hardly be open to the slightest question. After all, he is a Western man and the entire credit belongs to the West Coast. Perhaps the greatest benefit that has been derived has been the uniting of the two sections, East and West, through the adoption of the same standards in racing.

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Maximum Value in Medium Duty Motors

For medium duty service Kermath builds a group of cruiser motors of unexcelled efficiency.

You are offered quite a wide choice to fit your requirements. There is the 35-50 H. P. 4 cylinder series—the 65—85 and 100 H. P. 6 cylinder series.

Each one of these motors under the most diversified conditions will deliver maximum power with exceptionally low gas and oil consumption.

In fact, pound for pound we believe Kermath delivers more power—in smoother flow—at less cost than any comparable motors ever built.

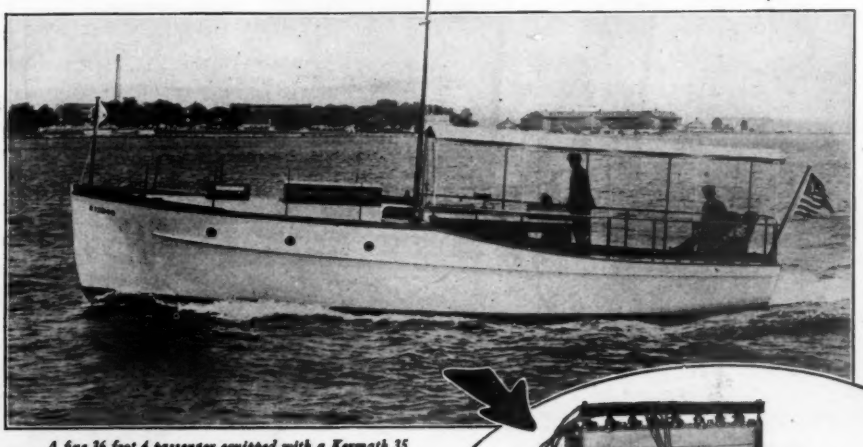
These medium duty Kermaths are literally covered with modern refinements.

Heavy cast iron cylinder blocks—5 and 7 bearings, statically and dynamically balanced crankshafts, force feed lubrication and specially designed clutch and reverse gears are a few outstanding features.

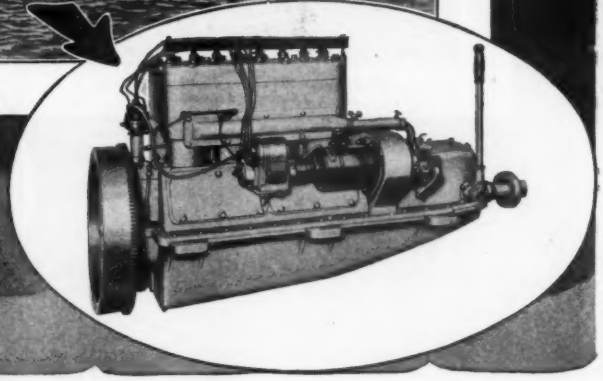
Send for the catalog. Study, at your leisure, the almost endless list of features which are the responsible facts for the sweeping success of these medium duty Kermaths.

Until you have driven a Kermath you have not experienced real day in and day out dependable and amazing power.

"A Kermath Always Runs"



A fine 36 foot 4 passenger equipped with a Kermath 35 —Speed 11½ m. p. h.



Advertising Index will be found on 3rd last page

KERMATH

The 4 Cylinder Motor With a World-Wide Reputation

The group of 12-16 and 20 H. P. 4 cylinder Kermaths formed the foundation of the ever increasing Kermath business. The high rating and international reputation of these Kermaths needs no introduction.

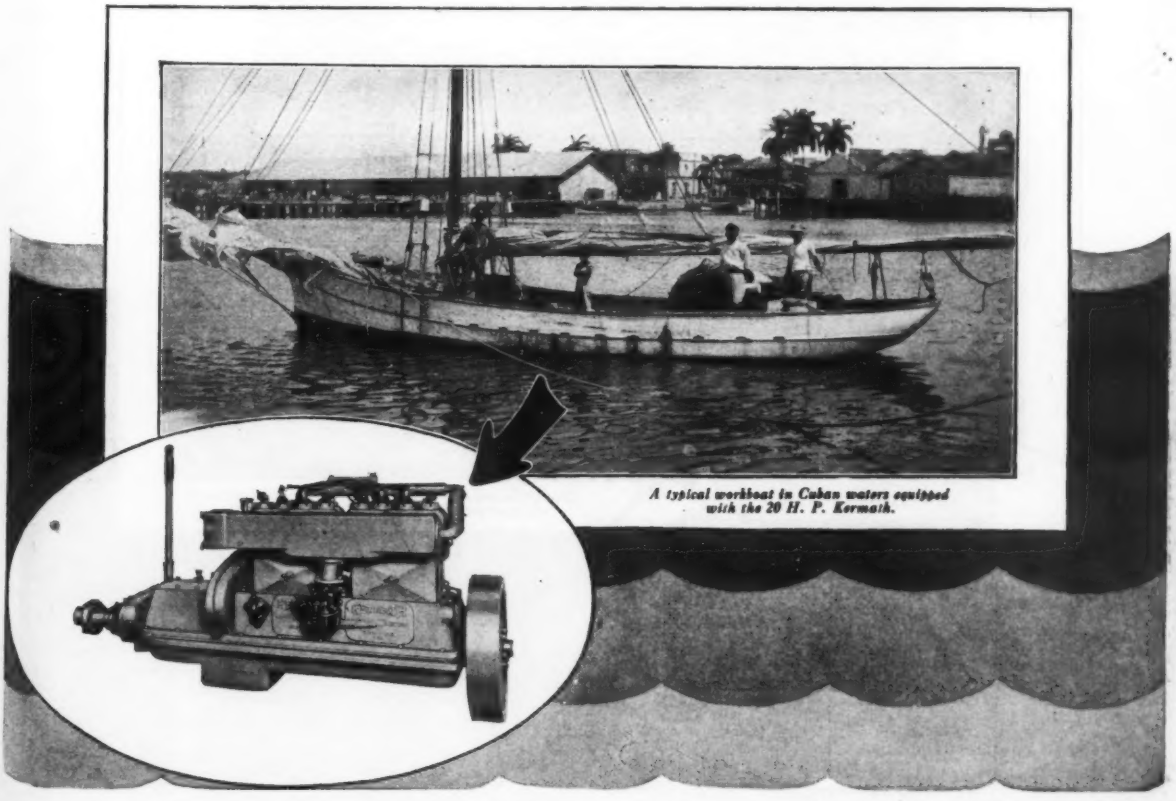
Year in and year out thousands of these 4 cylinder Kermaths give a flawless performance. In fact, Kermath reliability is a byword in the leading boating localities throughout the world.

The sturdy 4 cylinder Kermath has earned its reputation because of the high standards and modern methods employed in engineering and production.

Particularly suitable and economical for cruisers up to 30 feet, large launches and work boats, as well as auxiliary power for sailing craft.

Powerful in operation, rugged in construction — economical on oil and gasoline, *here* is just the motor that will fit your boat and your purse and give you the very utmost in marine motor satisfaction. Write today. Get the facts before you buy.

"A Kermath Always Runs"



A typical workboat in Cuban waters equipped with the 20 H. P. Kermath.

KERMATH

The Aristocrat of High Speed Motors

More and more are the leading builders of high grade power boats standardizing on the Kermath Big 6 in either the 100—125 or 150 H. P. Models. And they do this solely for one reason—in competition Kermath out performs the field.

The following telegram from the Banfield Sea Skiff Works is typical:

> **"Test just completed with 150 H. P. Kermath in our 32 foot cruiser shows speed of 30 miles per hour. This is remarkable performance and we give you all the credit in the world for turning out such a motor."**

The above is an unbiased opinion of an authority. We can show you scores of others.

The Kermath big Sixes develop unusually high speed ranges which are unapproachable in the given motor sizes. If you want your boat to fairly fly, one of these big Sixes is the motor you are seeking.

That smooth as silk performance and peppy acceleration which is found in these Kermaths is due to exceptionally fine manifolding, larger valve areas and compression ratios balanced to the service required.

7 Bearing Crankshafts, extra large, machined all over and statically and dynamically balanced. Vibration entirely eliminated. Dual carburetors—force feed lubrication. These are the features that provide that extra speed—dependable power flow.

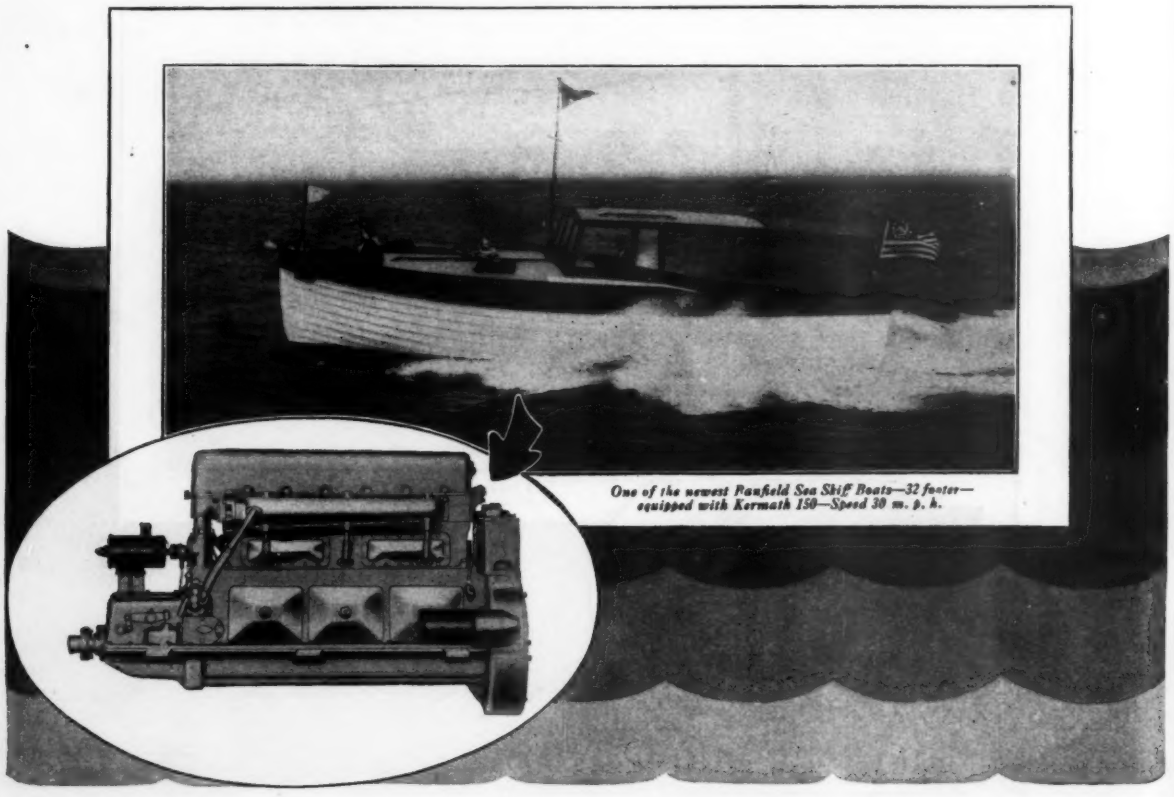
Send for the handsome Kermath catalog. This tells you about the full line. Let the Kermath experts advise you at no expense to yourself.

KERMATH MANUFACTURING CO.
5879 Commonwealth Ave., Detroit — 90 King St. W., Toronto, Ont.

New York Display Rooms: 50 W. 17th St.
Boston Display Rooms: 1037 Commonwealth Ave.

3 to	$135 to
150 H. P.	$2300

"A Kermath Always Runs"

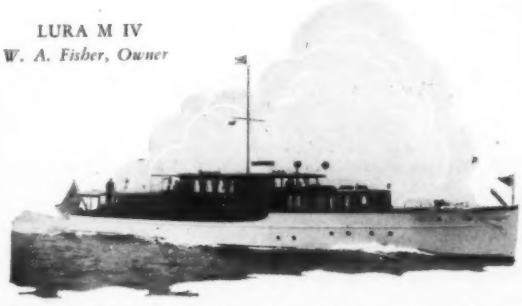


One of the newest Banfield Sea Skiff Boats—32 footer—equipped with Kermath 150—Speed 30 m. p. h.

Advertising Index will be found on 3rd last page

Frigidaire Afloat

LURA M IV
W. A. Fisher, Owner



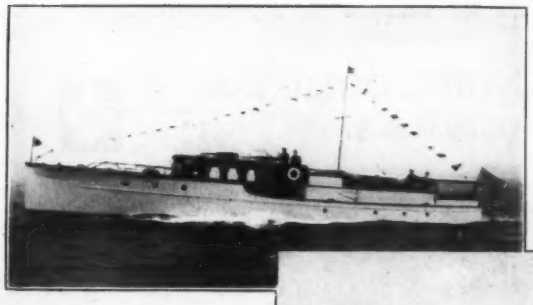
FOUR new Diesel yachts . . . each the finest of their type and built for owners of unusual prominence . . . are equipped with Frigidaire automatic refrigeration as specified by John H. Wells, Inc., designers.

Two Frigidaires, one each in the galley and the lobby of the owner's stateroom, are installed in the Lura M IV and the Margaret F III . . . 106 ft. craft built for W. A. Fisher and L. P. Fisher, respectively. One Frigidaire each is used in the galleys in the Cigarette III for L. Gordon Hammersley and the Frolic III for Walter P Chrysler.

Afloat or ashore, Frigidaire is quiet, powerful, efficient. It freezes ice quickly . . . keeps food fresh and safe to eat . . . protects health constantly . . . ends the expense and the bother of ice refrigeration. Above all, it's dependable . . . proved by the half-million now in use.

Descriptions of models for all uses gladly sent upon request.

FRIGIDAIRE CORPORATION, Dayton, Ohio
Subsidiary of General Motors Corporation



FROLIC III
Walter P. Chrysler, Owner

CIGARETTE
L. Gordon Hammersley, Owner

MARGARET F III
L. P. Fisher, Owner

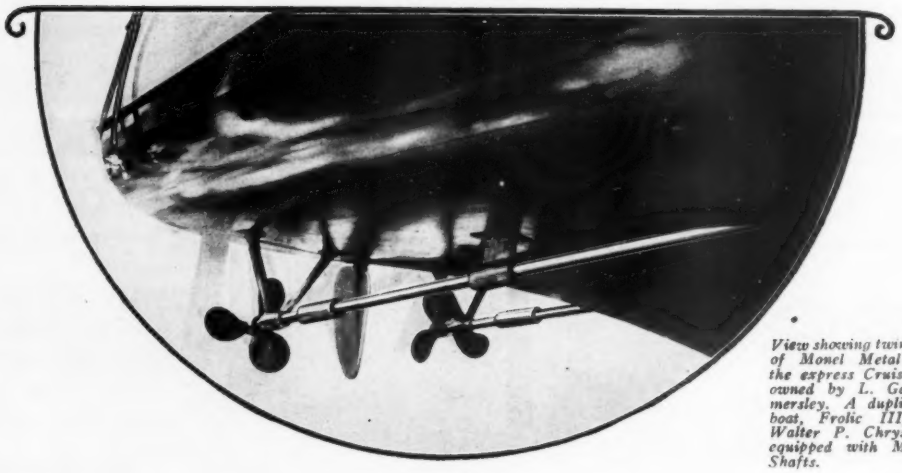
FRIGIDAIRE

PRODUCT OF GENERAL MOTORS

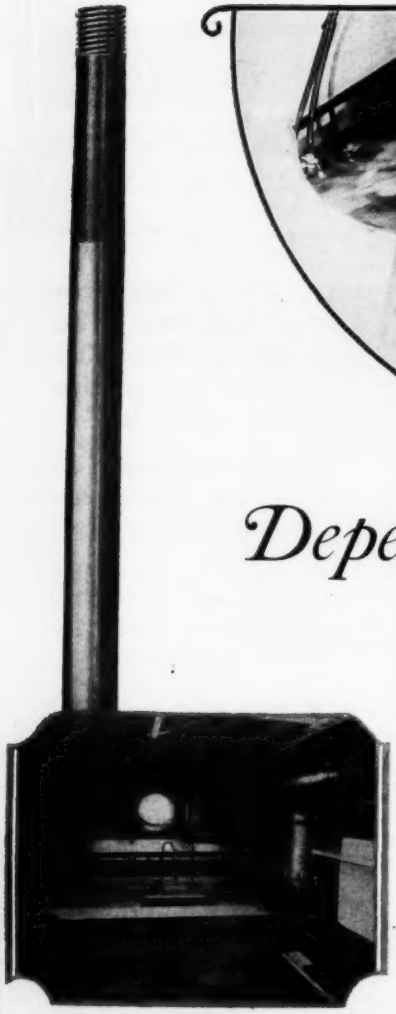
"Service that's Different" JOHN H. WELLS, Inc. Yacht Brokers Marine Architects

Monel Metal Shafts

for Wells Designed Yachts CIGARETTE and FROLIC III



View showing twin installation of Monel Metal Shafts on the express Cruiser Cigarette owned by L. Gordon Hammersley. A duplicate of this boat, Frolic III, built for Walter P. Chrysler is also equipped with Monel Metal Shafts.



Monel Metal is extensively used in the galley on Cigarette. The two sinks, drinking water glass stand, the hood over gas range and water heater as well as the counter and bulkhead fire-sheathing back of range and heater are of Monel Metal.

Dependable Power Transmission

MONEL METAL shafts are specified by leading naval architects to insure dependable transmission from engines to propellers in modern motor yachts. Recent installations of this superior shafting are on the 75-foot twin-screw express cruisers Cigarette and Frolic III designed by John H. Wells, Inc.

While the use of Monel Metal Shafts is now widespread in custom boat building, they have also been adopted as regular equipment on Dodge Watercars, Chris-Craft Runabouts and other outstanding standardized craft.

Monel Metal shafts possess an over abundance of strength and toughness—even stronger than steel. In addition to being absolutely rust proof in salt water, their rigidity reduces whipping and vibration to an absolute minimum. Monel Metal shafts are equally appropriate for use with bearings of babbitt, bearing-bronze, or Goodrich Cutless Rubber Bearings.

Send for "List B" of Monel Metal and Nickel literature.

Monel Metal is a technically controlled Nickel-Copper alloy of high nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.

MONEL METAL

THE INTERNATIONAL NICKEL COMPANY (INC.) 67 WALL STREET, NEW YORK, N. Y.

"CIGARETTE" Equipped with Four Goodrich Cutless Rubber Bearings!

The new 75-ft. super-express cruiser, "Cigarette," designed by John H. Wells, Inc., for L. Gordon Hamersley of New York and just completed at the plant of Henry B. Nevins, Inc., City Island, N. Y., equipped with Goodrich Cutless Rubber Strut Bearings.

The photograph shows the pair of 2¾" x 18 ft. cold drawn Monel metal shafts, each supported by two struts and fitted with Goodrich Cutless Rubber Bearings.

Among other Cutless Bearing-equipped, Wells-designed yachts recently put in commission are Lura M. IV, for W. A. Fisher, of Detroit; Margaret F. III, for L. P. Fisher of Detroit; Frolic III, for Walter P. Chrysler of New York.

Cutless Rubber Bearings not only *outlast other bearing materials* but in addition *increase propeller speed, reduce vibration, prevent shaft scoring* and are the *most economical in the long run.* Specify Goodrich Cutless Rubber Bearings for your next boat.

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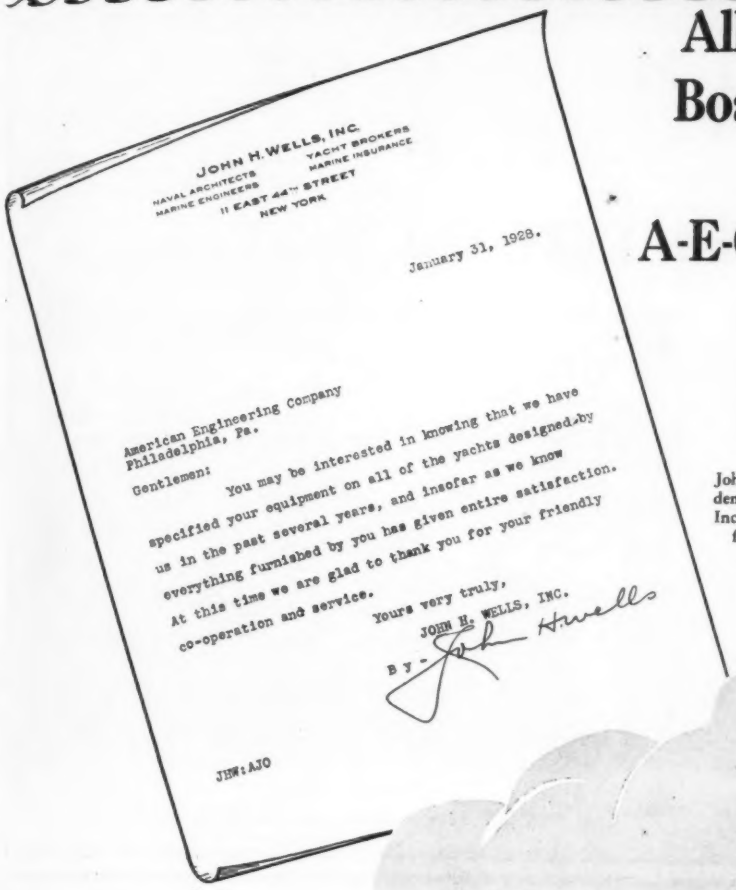
"Service that's Different"

JOHN H. WELLS, Inc.

Yacht Brokers
Marine Architects

All Wells Designed Boats Are Equipped *with* A-E-CO WINDLASSES



JOHN H. WELLS, INC.
NAVAL ARCHITECTS — YACHT BROKERS
MARINE ENGINEERS — MARINE INSURANCE
11 EAST 44TH STREET
NEW YORK

January 31, 1928.

American Engineering Company
Philadelphia, Pa.

Gentlemen:

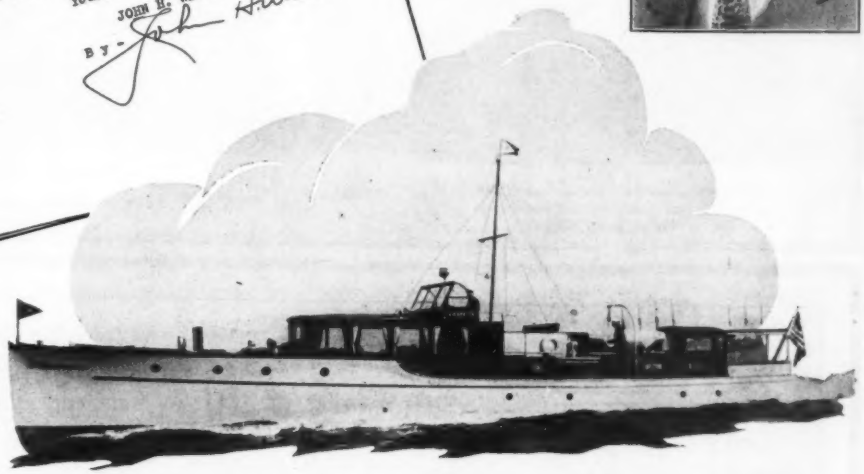
You may be interested in knowing that we have specified your equipment on all of the yachts designed by us in the past several years, and insofar as we know everything furnished by you has given entire satisfaction.

At this time we are glad to thank you for your friendly co-operation and service.

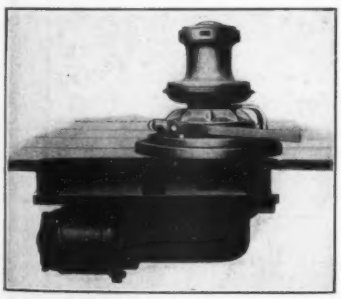
Yours very truly,
JOHN H. WELLS, INC.
By - John H. Wells

JHW:AJO

John H. Wells, President of John H. Wells, Inc., designers of a large fleet of fine yachts.



Cigarette, 75-feet, one of four yachts just completed from designs by John H. Wells, Inc., all of which are A-E-Co equipped.



A-E-CO Electric Capstan Windlass, for rope or chain. This model windlass is used on the Cigarette shown above.

THE twin-screw yachts, Cigarette-75 ft., Margaret F III-106 ft., Lura M IV-106 ft. and Frolic III-75 ft. described in this section and designed by John H. Wells, Inc., are, like all Wells designed yachts, equipped with A-E-CO Windlasses. John H. Wells, Inc., is only one of a number of prominent naval architects who standardize on A-E-CO equipment. This preference is based solely upon the superior design, unexcelled performance, quiet operation and streamline beauty of A-E-CO Windlasses.

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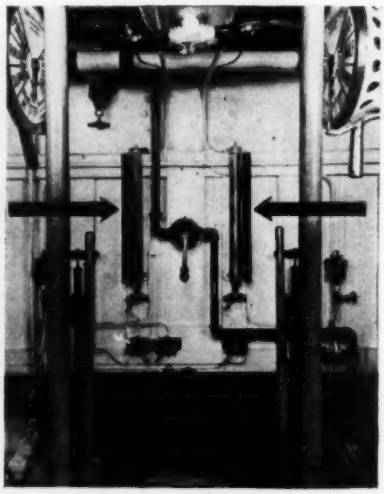
TANK GAUGES
for
Water and Fuel Oil Tanks



This shows installation of two Pneumercator Gauges in the engine room of Margaret F III

PNEUMERCATOR Tank Gauges are used on the Wells designed yachts Lura M IV and Margaret F III—106 feet—and on the Cigarette and Frolic III—75 feet.

Pneumercator Tank Gauges centralize the gauging of the fuel and water tanks. You can install these gauges any distance from the tanks. They always give a direct reading of the tank contents.

No floats, diaphragms, electric contacts or other parts requiring attention or replacement are used in Pneumercator Tank Gauges. There are no moving parts.

Pneumercator Tank Gauges Combine Simplicity, Accuracy and Convenience.

Approved by the Underwriters' Laboratories

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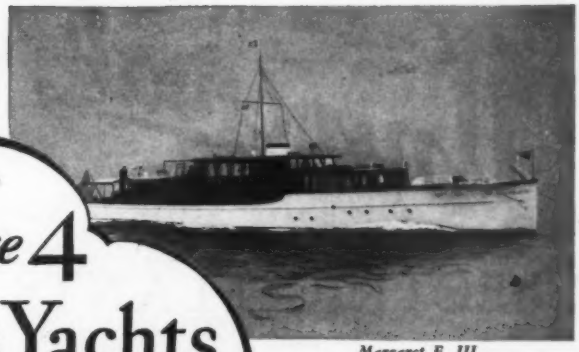
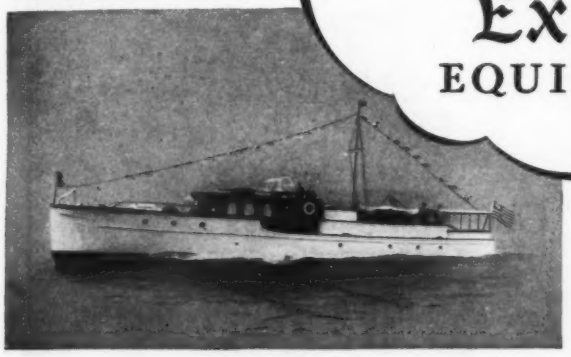
"Service that's Different" JOHN H. WELLS, Inc. Yacht Brokers Marine Architects

Cigarette
Designed by John H. Wells, Inc.
Built by Henry B. Nevins, Inc.,
for Mr. L. Gordon Hammersley.

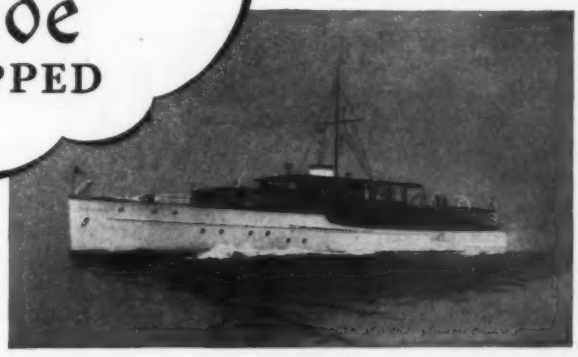


Margaret F. III
Designed by John H. Wells, Inc.
Built by Robert Jacob, Inc.,
for Mr. L. P. Fisher.

These 4 Famous Yachts Exide EQUIPPED



Frolic III
Designed by John H. Wells, Inc.
Built by The Mathis Shipbuilding Corp.,
for Mr. Walter P. Chrysler.



Lura M. IV
Designed by John H. Wells, Inc.
Built by Robert Jacob, Inc.,
for Mr. W. A. Fisher.

Lights, winches, refrigeration, auxiliary pumps, radio . . . every power requirement amply met by these sturdy batteries

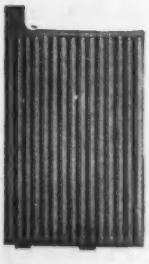
TO meet the heavy power requirements of the four most famous new yachts of the year, John H. Wells, Inc., their designers, specified Exide-Ironclad Yacht Batteries!

Two of these new craft—*Lura M. IV* and *Margaret F. III*—are fast, luxurious 106-foot cruisers. The remaining two—*Cigarette* and *Frolic III*—are speedy 75-foot commuters. Anchor hoists, winches, auxiliary pumps, radio, lights, refrigeration systems—all are electrically operated on all four boats. And all draw their current from sturdy, dependable Exide-Ironclads.

These batteries always insure an ample reserve of power. Even when the auxiliaries are working, there is no flicker, no perceptible dimming of the lights. A constant voltage is maintained at all times.

Exide-Ironclad Yacht Batteries are famous for their long-lived dependability—for their rugged strength—and for their economy of upkeep. They always give just the sort of reliable, trouble-free battery service every boat owner wants. And they are favorably priced, too.

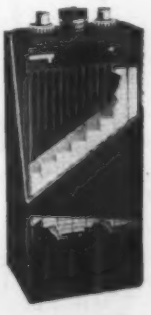
For detailed information about these dependable yacht batteries, just write to our Philadelphia Office. We will gladly put you in touch with the branch nearest you.



The Exide-Ironclad positive plate consists of a metal grid, from which extend metal conducting rods, each surrounded by active material and cased in a slotted rubber tube.

Exide IRONCLAD YACHT BATTERIES

This is an Exide-Ironclad cell, cut away to show the plates in position.



THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

Exide Batteries of Canada, Limited, Toronto

Detroit and the Harmsworth!

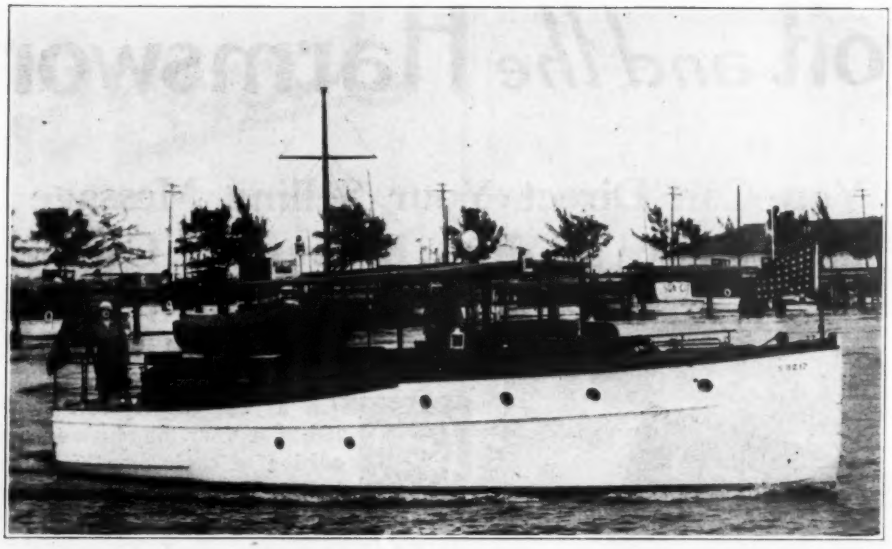
You Can Direct Your Selling Message to America's Most Enthusiast Group of Yachtsmen—At Very Nominal Cost

ONCE a year the Detroit Yacht Club publishes a very handsome special de luxe edition of their monthly magazine. This incorporates a full program of the Detroit Regatta. This year it will cover the Harmsworth Races. It is handsomely bound, profusely illustrated, authoritative, complete. It represents one of the most distinguished groups of yachtsmen in the world. Men with money to spend without stint. This is their publication. They are keenly interested in the Main Sheet. Your advertising message reaches them in a friendly, personal, effective manner. Let us have your space reservations early. Location will be alloted to receipt of orders. Write for space, rates and circulation data today.

W. E. Lenhart

Editor.

Advertising Forms Close August 1st



"After 5400 Miles—

Running as smoothly as the day we christened her"

Cedar Lake, Ind.,
June 3, 1928.

THE BUDA COMPANY,
Harvey, Ill.

Gentlemen:

Mrs. Lassen and I have recently returned from our second cruise in the yacht "Lassen." We started the last of October from Daytona, Florida, and were very much pleased with the way our boat started off, after a summer's idleness.

Starting from Daytona, we cruised down to Key West, swung around from the Gulf of Mexico, "did" the British West Indies, then out into the Atlantic and back to Miami. It was a wonderful trip. We were gone over five months and covered more than 2,400 miles.

When we put the boat up in Daytona again for the summer, the motor was running just as smoothly as the day we christened her, two years ago. Since then, we have covered about 5,400 miles.

Before crossing the Gulf Stream, we talked with some other captains who looked at our boat and said we should have a twin screw. I replied that I had perfect confidence in my Buda motor, and my remark was certainly justified. Our motor has never given us the slightest trouble and the only repairs necessary after two years' use were the regrinding of a couple of the exhaust valves.

We wouldn't trade our boat for Old Ironsides, and we think The Buda Company has a motor to be proud of.

Yours truly,
(Signed) C. T. LASSEN.

Buda Marine Engines range from 80 to 130 H.P. Write for Bulletin No. 632.

Branch Offices:

30 CHURCH STREET . . . NEW YORK, N. Y.
664 MISSION STREET . SAN FRANCISCO, CAL.

THE BUDA COMPANY, HARVEY, CHICAGO SUBURB ILLINOIS

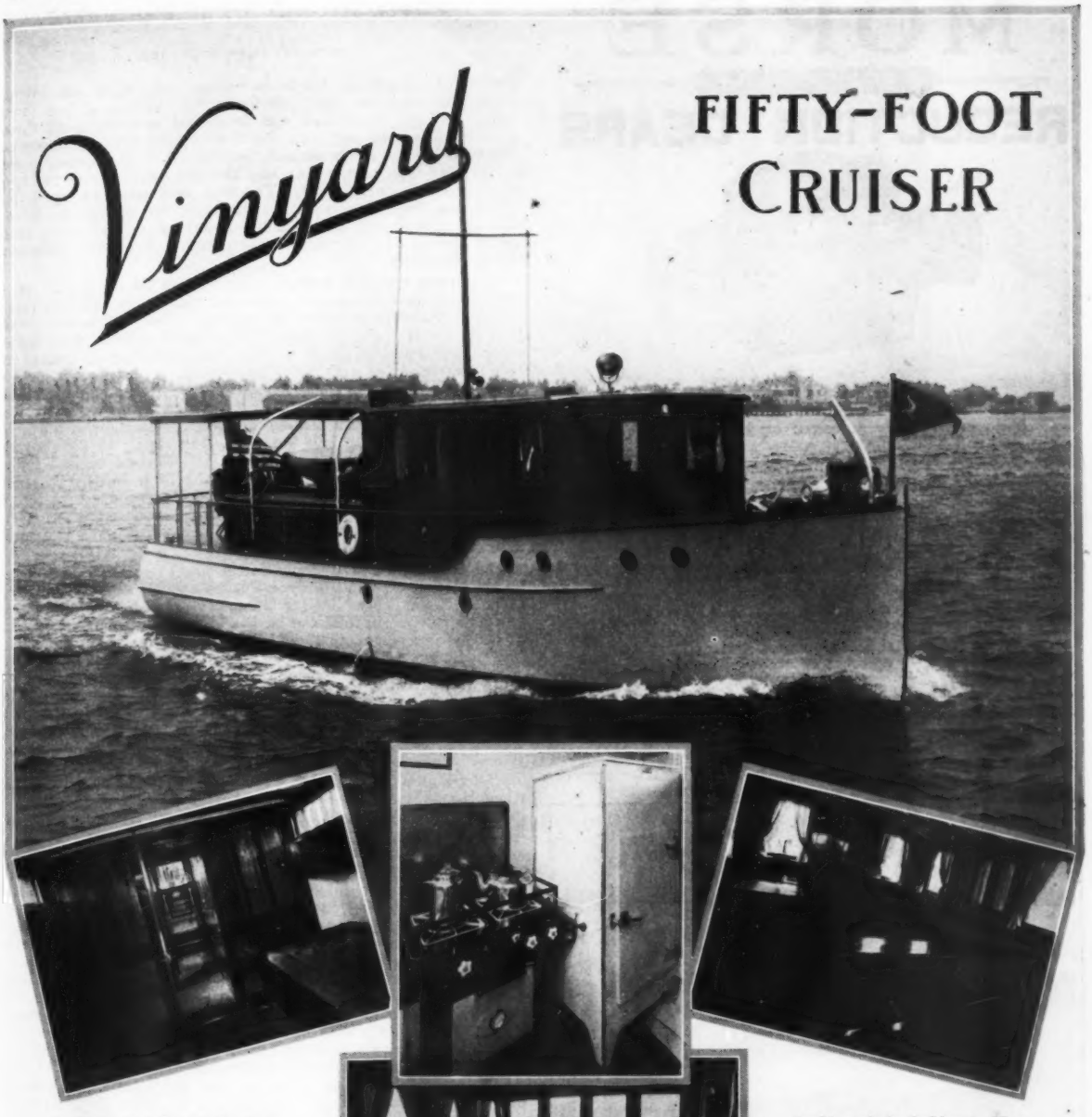
ESTABLISHED 1881

BUDA
MARINE
POWER

Advertising Index will be found on 3rd last page

Vinyard

FIFTY-FOOT CRUISER



Looking aft below deck, showing interior arrangement.

Above center:—A corner in the galley showing large size two-burner range with oven and Frigidaire refrigerator.

Looking aft in deckhouse. Note roominess and large windows.

At left:—All operating controls are centered on bridge, giving a complete one-man control of boat.

Owners are telling us of the wonderful performance of their Vinyard Fifty-Foot cruisers in rough water and inclement weather. One owner writes:

"I know it would do your heart good to hear Capt. Smith's report and enthusiasm. He is as I think you know an old time yachtsman and also an ocean captain—knows ships and motor boats—and he says the Genevra's performance (a Vinyard Fifty-Footer) in a gale of wind off Barnegat was absolutely perfect."

Vinyard Fifty-Foot Cruisers are delivered fully equipped, including Frigidaire Electric Refrigerator, Delco Lighting Plant, Delco Water Pressure System and a choice of Sterling or Kermath Power Plants.

Write today for complete description and price.

VINYARD SHIP BUILDING COMPANY, MILFORD, DELAWARE, U. S. A.

Designers and Builders of Yachts and Cruisers of the Highest Class

Eleven Records Set at Worcester

(*Continued from page* 15)

time other contestants began to realize that racing was taking place and appeared more punctually for the second and third heats. Arthur Sutherland was successful in winning all three heats of this race and won the final award with 1,200 points. The next event was the class A free for all in which many more competitors took part. This was also run once around the two mile course in three heats. The first heat was won by J. E. Wilkinson, the second by A. T. Buffinton and likewise the third. The third heat was made in the best time of the entire race and a record of 23.84 m.p.h. was established by Mr. Buffinton during this heat.

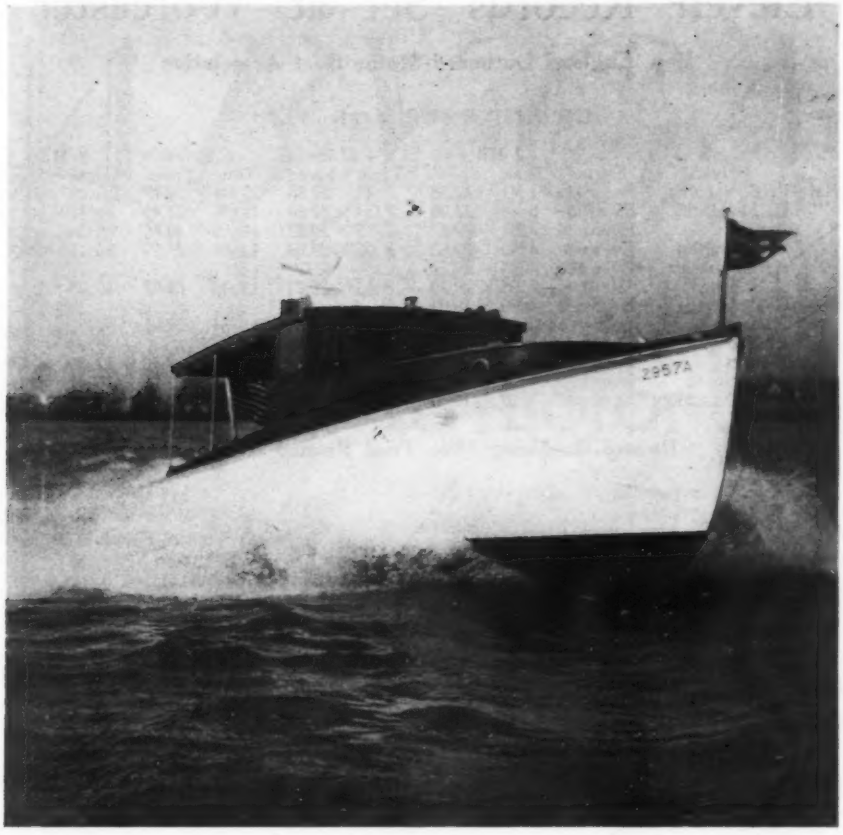
The events for class B boats were next on the program. Here again many more contestants appeared than in the previous race. Thirteen boats finished in the amateur class and twenty took part in the free for all class. Once again records were made when A. Sutherland with a little Lockwood engine created a two mile record at a speed of 28.35 m. p. h. Unfortunately he was unable to secure enough points in the first and third heats to enable him to be among the winners on points. First place went to R. H. Spencer driving a Spencer Special with a Hartford engine with which he secured 1,013 points. In the class B free for all J. E. Wilkinson, driving a Lockwood engined Baby Cute Craft, was successful in taking the three heats, one after the other, and in the third established a new mark of 30.25 m. p. h. which stands as a record in competition for class B engines in the free for all group. His best heat was the third in which he made this record.

The events were now going faster since the larger and more powerful class C engines were due to appear. In the amateur event at two miles with class C engines seven boats finished the two mile run and in this race H. Ross Maddocks, the Commodore of the New England Outboard Motor Boat Association driving Baby Whale XIII, Evinrude powered, also had an easy time of it, winning the three heats straight. His speed ranged from 32 to 32.88 m. p. h. which latter figure was made in the second heat creating a record in the Class C amateur division. In the free for all division in this same class a series of trial flights were held to determine who should be eligible for the final race. It was so arranged that the first five boats to finish in each of the four flights were eligible. The result of this was determined when H. R. Maddocks came in first with a speed of 32.14 m.p.h. in his Baby Whale XIII driven by an Evindure engine. Fourteen boats were successful in finishing this race out of a larger number of starters.

The final event of the day was a ten mile grand free for all. Unfortunately the weather had turned and the calm conditions prevailing earlier had changed. A stiff wind had set in across the course causing the committee boat some annoyance by dragging its anchors and also by blowing over the timing clock which had been mounted on the top of the vessel. The race however, got away on time in the face of the rapidly approaching darkness and storm, the committee had difficulty in reading the numbers on some of the boats. The casualties in this event were heavy. Only twelve boats were in the running shortly after the start. Of these two dropped out in the second lap, one in the third lap, one in the fourth lap, and two in the fifth lap. Only six boats finished the ten mile run and H. R. Maddocks again proved to be the winner by covering the ten miles at the rate of 32.668 m.p.h. He was closely followed by R. S. Spencer in the Spencer Special, and J. C. Smith in a Fairchild Aero. All of the three boats in the lead were powered with Evinrude engines. A noticeable feature of the winner's performance was the remarkable consistency with which he covered the ten miles. The speeds of the several laps were 32.00 m.p.h. for two miles; 32.50 m.p.h. for four miles; 32.43 m.p.h. for six miles; 32.70 m.p.h. for eight miles; and 32.67 m.p.h. for ten miles.

A remarkable feature of this regatta was the series of very wonderful times established in all classes. The conditions for fast driving were ideal most of the time. On the day of the time trials not a ripple disturbed the surface of the lake and for all of the races on the Decoration Day program the conditions were equally good with the single exception of the last event. The local committees in charge worked strenuously to make things pleasant and agreeable for the visitors and C. Alan Biss, as chairman of the local race committee, composed of Messrs. Earle Smith, Slader Washburn, H. Winchester, Roscoe Bicknell and others, are to be commended for their very excellent work. The Quinsigamond Boat Club served as headquarters for the committees and contestants and a dinner was served to them and other visiting yachtsmen at the conclusion of the regatta on the evening of Decoration Day.

On page 126 will be found a summary of the times and speeds made in the Grand free for all—10 mile race, as well as details of the best one mile record trials.



Outstanding Performance.....Striking Value

The Liggett "34" is a brand new boat—built throughout of mahogany and designed for outstanding performance at an outstanding price. The interior cabin arrangement is well planned and perfectly appointed. Four spring berths, a well equipped galley, a toilet, ice chest and lockers make it as complete as any boat you might own. Three different Kermath motors give it varying speeds—the 6-cylinder "65" offers 13 miles; the "125," 17 miles, and the "150," a thrilling 20. It's a great sea boat—safe and sturdy. Here's riding performance as thrilling as a runabout. Here's riding comforts unparalleled for smartness and luxury. Here's a real family cruiser at a real cruiser price! Write for our illustrated literature. Demonstrations available.

13 mile model	17 mile model	20 mile model
$5475 complete	$5875 complete	$6275 complete

The Liggett "34"

A. G. LIGGETT & SON COMPANY

Wyandotte - - - - - - - - Michigan

Boat builders for 30 years

Eleven Records Set at Worcester

New England Outboard Motor Boat Association

EVENT 7

GRAND FREE FOR ALL

Boat Number	and Name	Driver	Engine	2 Miles Time	2 Miles Speed	4 Miles Time	4 Miles Speed	6 Miles Time	6 Miles Speed	8 Miles Time	8 Miles Speed	10 Miles Time	10 Miles Speed
08-130	Spencer Special	R. S. Spencer	Evinrude	3:41	32.58	7:22	32.58	11:04	32.47	16:26	31.10	19:10	31.304
08-133	Baby Whale	H. Maddocks	Evinrude	3:45	32.00	7:23	32.50	11:06	32.43	14:41	32.70	18:23	32.668
08- 37	Areo	J. Smith	Evinrude	4:01	29.87	7:55	30.32	11:56	30.16	16:26	29.20	20:25	30.050
08-110	Cute Craft	A. Buffington	Evinrude	4:03	29.63	8:06	29.63	12:10	29.59	16:15	29.5	20:16	29.605
08- 24	Aero	A. Schwarzler	Evinrude	4:04	29.50	....	....	....	....	....	....	out in second lap	
08-186		T. Eldridge	Johnson	4:05	29.39	8:13	29.21	12:08	29.67	16:03	29.9	19:58	29.378
08-170	Areo	G. DeAngelis	Evinrude	4:09	28.91	....	....	....	....	....	....	out in second lap	
08- 16	Cute Craft	K. Ames	Lockwood	4:13	28.46	8:25	28.52	12:54	27.91	....	....	out in fourth lap	
08-121	Century Kid	P. Titcomb	Evinrude	4:28	26.87	8:53	27.02	....	....	....	....	out in third lap	
08-107		Horton	Lockwood	4:29	26.76	8:52	27.07	13:04	27.50	17:30	26.90	out in fifth lap	
08-199	Cute Craft	J Wilkinson	Lockwood	4:49	24.91	8:56	24.86	12:53	27.90	16:47	28.60	20:39	29.055
01- 05	Flying Fish	V. Withstandley	Evinrude	7:29	16.03	11:43	30.48	16:00	22.50	20:15	23.70	out in fifth lap	

Record Breaking Mile Trial Record Attempts

May 29

Class B—Free-for-All—Lockwood

J. E. Wilkinson—Wilkie Baby Cute Craft

1:40	36.000 m. p. h.	
1:40	36.000 m. p. h.	
1:41	35.664 m. p. h.	Average Speed
1:40.2	35.930 m. p. h.	35.660 m.p.h.
1:41.8	35.364 m. p. h.	
1:42.8	35.021 m. p. h.	

Class C—Free-for-All—Evinrude

J. C. Smith—Fairchild Aero 08-170

1:45.00	34.286 m. p. h.	
1:44.6	34.417 m. p. h.	
1:45.6	34.092 m. p. h.	Average Speed
1:44.0	34.615 m. p. h.	34.287 m.p.h.
1:46.0	33.962 m. p. h.	
1:44.8	34.352 m. p. h.	

Class C—Amateur—Evinrude

G. De Angelis—Fairchild Aero 037

1:47.8	33.395 m. p. h.	
1:45.0	34.286 m. p. h.	
1:47.0	33.644 m. p. h.	Average Speed
1:46.0	33.962 m. p. h.	33.806 m.p.h.
1:47.8	33.395 m. p. h.	
1:45.4	34.156 m. p. h.	

Class E—Amateur—Johnson

H. Ross Maddocks—Baby Whale 08-132

1:43.6	34.749 m. p. h.	
1:43.4	34.817 m. p. h.	
1:43.4	34.817 m. p. h.	Average Speed
1:42.0	35.294 m. p. h.	35.022 m.p.h.
1:43.0	34.951 m. p. h.	
1:41.4	35.504 m. p. h.	

Coming Events

(*Continued from page 7*)

August 3—Eighth Annual Bayside-Block Island Auxiliary Handicap
August 3—Tupper Lake, N. Y.
August 4—Bellport, L. I., Great South Bay Yacht Racing Ass'n
August 4, 5—Cincinnati, Ohio
August 4, 6, 7—Duke of York International Trophy Race, Southampton, England.
August 4—Marblehead Race Week
August 4—Edgartown, Open Regatta
August 5—New England Outboard Regatta, Onset, Mass.
August 5, 6—Long Beach, Calif., The Rudder International Trophy Race
August 6-11—Cruise Week, Great South Bay Yacht Racing Association
August 6-11—Eighth Annual Regatta, Southern California Yachting Asso. Long Beach, California—Newport Harbor Yacht Club
August 6—Amityville, L. I., Great South Bay Yacht Racing Association
August 6, 7—Saranac Lake, N. Y.
August 7—Babylon, Great South Bay Yacht Racing Association
August 8—Bayshore, Great South Bay Yacht Racing Association Motor Boat Races, Regatta
August 9—Point-O-Woods Yacht Racing Motor Boat Races.
August 9—Lake Placid, N. Y.
August 9-23—New York Yacht Club Cruise and Regatta
August 9—Point-O-Woods Yacht Racing Motor Boat Races
August 11—Westport, New York
August 11—Bellport G.S.B.Y.R. Asso. Motor Boat Races, Regatta
August 16-18—Niagara Boat Club, Buffalo, N. Y.
August 16-18—New England Outboard Regatta, Newport, R. I.
August 17, 18—Narragansett Bay Regatta Assn., Newport, R. I.
August 17-18—Iroquois Yacht Club, Lachine, Quebec
August 18—Sayville, Great South Bay Yacht Racing Asso.
August 18—Bar Harbor Yacht Club, Open Regatta
August 20-25—New Bedford, Massachusetts, Yacht Club Race Week, A. P. B. A. Sanction
August 21—New York Yacht Club Races off Newport
August 25—Westhampton Motor Boat Races, Regatta
August 30-Sept. 6—International Star Yacht Racing Association championship series. Newport Harbor Yacht Club
September 1, 2, 3—Detroit Yacht Club, Detroit, Mich.
September 1—Bellport, Great South Bay Yacht Racing Asso.
September 8—Auxiliary Race, Gloucester, Gulf of Maine
September 9—Broad Channel Yacht Club
September 14, 15, 16—Norfolk Races, Norfolk, Virginia
September 16—Ocean Race, Cruisers, Sheepshead Bay Yacht Club
September 25-October 5—Lake of Como, Italy
October 5, 6—National Outboard Regatta, Wilmington, N. C. A.P.B.A. Rules
December 15, 16—National Championship Races, San Diego, California
March 22, 23, 1929—Miami Beach, Florida

Entry Blanks for Narragansett Regatta

Entry blanks for the Narragansett Bay regatta, to be held at Newport, R. I., on August 17 and 18th, under the sanction of the A. P. B. A., must be filed before August 14th with Dr. Horace P. Beck, Narragansett Bay Regatta Association, Newport, R. I. Some twenty events are promised among which are to be three for stock runabouts, one or two for the hydros, Biscayne Babies, Express Cruisers and of course, the everlasting outboards. Blanks for entry can be obtained by writing to Dr. Beck at the address named above.

Iroquois Yacht Club Extends Welcome

American yachtsmen are advised that the Iroquois Yacht Club of Lachine, Quebec, is open house for them while cruising in the vicinity of the club. Anchorage will be furnished likewise. The club is situated at the head of the Lachine Canal and offers the only anchorage for small yachts in the district, affording at the same time opportunity to make short cruises in the neighboring lakes. There is a perfectly sheltered basin with seven feet at low water and a landing dock for boats of any size up to 100 feet. A gasoline station is also at the club capable of furnishing any quantity of fuel.

The annual regatta of the club will be held this year on the 17th and 18th of August. Events will include races for 151's, all classes of outboards and displacement boats.

The Battery to Red Bank Outboard Race

The New York Harbor Outboard Marathon will take place on Saturday, July 28th, at 12:30 P.M. The course will be from a line off Battery Park, New York City, to a line to be established off the Red Bank Yacht Club, Red Bank, N. J. The distance is approximately 32 statute miles.

There will be cash prizes for those who manage to dodge the tow boats and get to the finish line. First prize for class C is $200. Second $100 and third and fourth are $80 and $50 respectively. For class B the prizes are for first and second, $100 and $50.

The entire course will be patrolled. During the afternoon of the race there will also be a regatta for outboards, runabouts, and other classes of boats, at Red Bank.

BABY GAR

..adds a new thrill to motor boating

No matter what your experience with fast runabout performance—if you have yet to ride in a Baby Gar, there is a new and lasting thrill to add to your motor boat enjoyment.

Irresistible is the sensation of riding in a Baby Gar for it rides, drives and maneuvers with the ease and comfort of the most luxurious closed automobile and besides Baby Gar drivers feel no fear for rough water as the level planing position of this boat makes her easy riding and dry even at high speeds.

Any Baby Gar distributor or dealer is ready to add this new and lasting thrill to your motor boat experience.

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In New York
1457 Broadway

In Boston
882 Commonwealth Ave.

In Chicago
301 W. 37th Street

In Cleveland
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In San Francisco
17th and Folsom Streets

In Detroit
Jefferson at Chene

Baby Gar 28 Sedan (Illustrated) - $5100
Baby Gar 28 Open Runabout - $4500
Speed *38-40* M. P. H.

Baby Gar 33 - - $9800
Speed *48-50* M. P. H.

Baby Gar 33 - - $11,800
Speed *53-55* M. P. H.

Luders Forty-Two Foot Cabin Runabout is now tastefully finished in pastel colors of beautiful hues. Sterling powered. Speed 28 miles per hour.

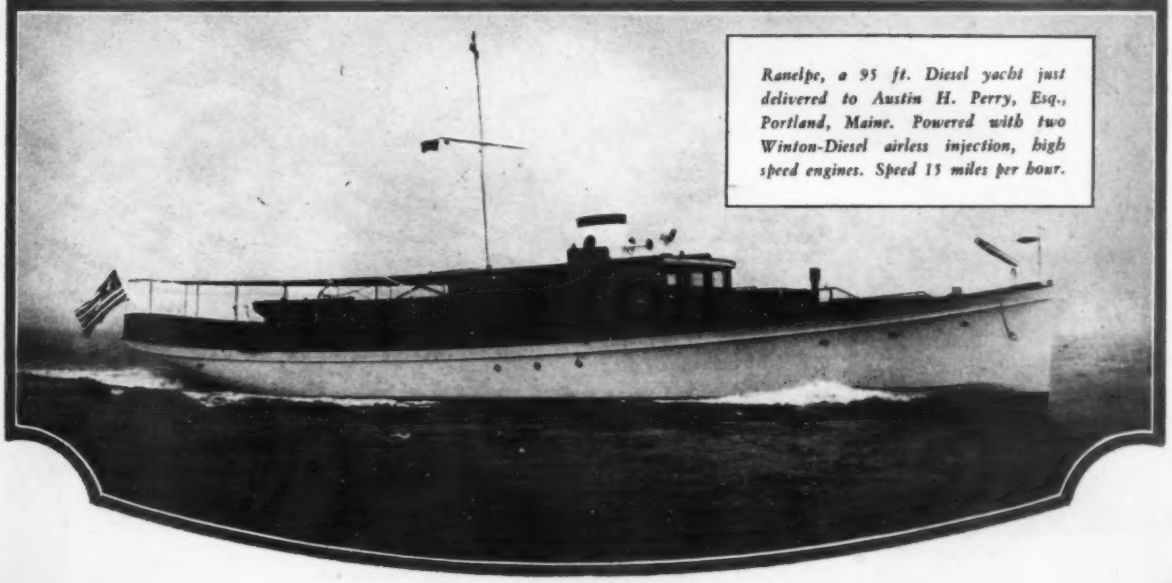
LÜDERSHIP

Your Assurance of Master Craftsmanship

EVERYTHING about a Lüdership boat contributes to the happiness, comfort and genuine satisfaction of the owner. Whether you purchase a Lüders Standardized Cabin Runabout or are considering a new custom-built yacht you have the Lüdership assurance of master craftsmanship.

Let us send you full particulars of the Luders Cabin Runabout or descriptions of some of our recent custom-built yachts

LUDERS MARINE CONSTRUCTION COMPANY
STAMFORD, CONNECTICUT



Ranelpe, a 95 ft. Diesel yacht just delivered to Austin H. Perry, Esq., Portland, Maine. Powered with two Winton-Diesel airless injection, high speed engines. Speed 15 miles per hour.

Hackercraft

Dolphin Quality a Perpetual Challenge

HERE'S a runabout that challenges your sporting instinct every time you go out. A boat that will outrun your desire for speed—outweather any sea you care to try—outperform any task you set for it. You can never exhaust its mastery of thrilling performance.

When you drive a Dolphin you know you have the best the market affords. Nothing but a special racing boat can pass you. No other boat of its size is so comfortable and easy riding, so safe and seaworthy, so beautifully finished or strongly built. No boat has a finer power plant.

29-ft. Dolphin, 11 passengers, Sterling Petrel motor, 40–42 miles per hour.....$4,950

29-ft. Dolphin Sedan, 10 passengers, Sterling Petrel, 40-42 miles per hour....$5,850

26-ft. Dolphin Jr., 9 passengers, 200-H.P. Scripps, 40-42 miles per hour.....$4,[illegible]

24-ft. Baby Dolphin, 9 passengers, 125-H.P. Scripps' 30-34 miles per hour.....$2,[illegible]

Prices quoted f. o. b. Mt. Clemens, Mich.

Advertising Index will be found on 3rd last page

HACKER DOLPHIN is the most highly refined boat in the $4,000 to $5,000 class. Designed by the most successful speed boat architect, John L. Hacker, and built under his personal supervision, it has all the exclusiveness of a custom craft. Men who know boats readily concede the superiority of Dolphin quality when they examine its construction and test its efficiency. A few minutes' ride is convincing proof of its ability.

You can't appreciate the unusual characteristics of this boat until you have experienced them yourself. Don't miss an opportunity to ride in the Hacker Dolphin.

Bigger—Faster—Safer—Roomier—Handsomer
Easier Rider—Finer Materials—Better Built

Demonstrations arranged by appointment.

HACKER BOAT COMPANY
MT. CLEMENS, MICHIGAN

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532 Lexington Ave. (at 49th St.) DETROIT
NEW YORK

WALTER H. MORETON CORPORATION
1043 Commonwealth Ave.
BOSTON

England Challenges for Harmsworth Trophy

(Continued from page 30)

Each country competing is allowed to run three boats only. The rules of the race necessitate that heats shall be run off until one country has won two races. The country which first wins two races shall be adjudged the winner of the trophy. The racing takes place on consecutive days except Sundays and the boats race as a team, that is to say if one British boat wins the first heat the first day and another British boat wins the heat on the second day, the race goes to Great Britain.

The race this year will be run at Detroit on September 1st, 3rd and 4th. It will be competed for over a course of five nautical miles, eight laps being covered in each heat, i. e., 40 nautical miles or 46.06 land miles in all. All boats will start together.

In 1921 the race was won by an American boat, Miss America II, at a speed of 59.75 statute m.p.h. Since then, although there has been only one race for the trophy, 1926, France being the challenging country, boats have been constructed giving much higher speeds than were attained on this occasion. The present official speed record for motor boats is held by America with Miss America II at a speed of 80.56 m.p.h.

Great Britain's effort this year is due solely to the courage and energy of Miss M. B. Carstairs. Not only is she financing the design and construction of three high speed boats which have been entered by her for the race through the challenging club, the Royal Motor Yacht Club, of Hythe, Southampton, but she will herself pilot the fastest boat in Great Britain's team.

Two of the Saunders-Napier motor boats have just been completed to her order. They have been named Estelle I and Estelle II. The design of the third boat will depend on the result of tests with the first two. The two boats are not identical for each has some special feature in construction not embodied in the other, and until an opportunity is given of testing the boats out on the water, no one can say which will be the faster.

They have been designed by F. P. Hyde Beadle, chief motor boat designer to Messrs. S. E. Saunders, Ltd., of Cowes, and have been constructed by this firm, who have been building racing boats for more years than any other firm in this country, boats of their manufacture having been represented in all British International Trophy races since its institution in 1903.

For the power plant Miss Carstairs has pinned her faith to the famous racing Napier engine, which enabled Flight Lieut. Webster to win the Schneider trophy for Great Britain at a speed of 281 m.p.h. over a distance of 217 miles (the fastest air race in the world), and which was the engine in Cautain Malcolm Campbell's car, when he set up a world's land speed record of 206.95 m.p.h.

It was in August of last year that Messrs. S. E. Saunders, Ltd., were first approached by Miss Carstairs and commenced the design of the boats which will represent Great Britain in 1928. The aim is to produce a boat capable of achieving a speed of 100 m.p.h., but any craft built must be of a more or less experimental nature, as, naturally, in setting about the design of such a boat one is entering an unknown quantity, as no one knows the effects on craft or crew of such colossal speeds on water.

In designing these two craft nothing has been attempted of a revolutionary nature. The aim in the mind of the designer has been to produce a boat extraordinarily light in weight, compatible with absolute reliability, compact in construction, streamlined in such a manner as to reduce resistance to a minimum, yet of remarkably high power. The result is amazing. Thin, strong, shell-like structures have been built round the powerful engine and courageous crew. Not a superfluous ounce of material is used. Although the Saunders-Napier boats, each develop 900 h.p. (never before has a motor boat been built developing such a high power for a single unit), the weight of the complete motor boat, including engine, fuel, starter and all accessories, is between 2,800 and 2,900 pounds.

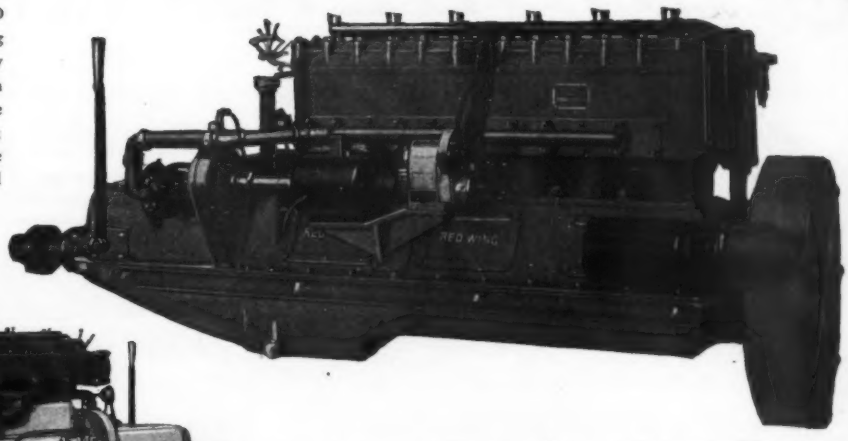
Every care has been taken in testing and trying out each part before it has been included in the design so that as far as is humanly possible it is known that they can withstand the enormous stresses likely to be imposed upon them under racing conditions at these high speeds. But until Miss Carstairs makes her first trial run it will be impossible to give any idea of how successful the designers have been in achieving what they have set out to do.

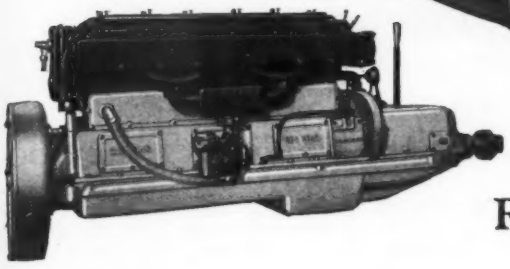
Both boats are of single step hydroplane design, that is to say, at speed the boat will be skimming the water on two points with practically half the boat out of the water. Both boats have the same engine power, the Napier Lion engine, but in one the engine is tilted up with the shaft pointing to the stern and will be driven direct to the propeller, while the other has the shaft pointing towards the bow and is driven through a gear box with a 1 to 1 gear ratio. Both boats have a fuel tank situated between the engine and the pilot's cockpit, with a capacity for 36 gallons.

(Continued on page 136)

Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

"Little Chief" THOROBRED unit powerplants, illustrating medium duty type with gray iron base at right, and high speed type with aluminum base below. Bores of 4½" and 5"; stroke, 6". Built with massive 7-bearing crank shaft, and full pressure lubricated.





THE "LITTLE CHIEF" RED WING THOROBREDS

TWO SIZES

BB-SIX, Bore 4½," Stroke 6"
Medium Duty, 50-80 H.P.; High Speed, 80-110 H.P.

BB-SIX "Special," Bore 5," Stroke 6"
Medium Duty, 75-100 H.P.; High Speed, 100-150 H.P.

Three seasons of superlative service in hundreds of fine craft have proved the adaptability and worth of the Little Chief Red Wing engines. These are rugged powerplants of great power, unusual smoothness, and with the absolute reliability and durability for which all Red Wings are famous. Built in two sizes; the regular BB6 model with bore of 4½", stroke 6"; and the BB6 "Special" with bore of 5" and stroke 6". Both sizes also furnished in true twin-screw pairs.

In addition to the wonderful performance of these engines, users are delighted with the completeness of the equipment, reasonable weight and compactness, and the convenient design of these engines. Why not write us today for full details as a first step towards greater satisfaction from your boat also?

1928 Catalog on Request.
Mention Boat Size Please.

12 THOROBRED SIZES
From 4 to 150 H.P.

1 and 2 Cylinders

K	4-5 H.P., 3¾"x4½"
KK	7-8 H.P., 3¾"x4½"

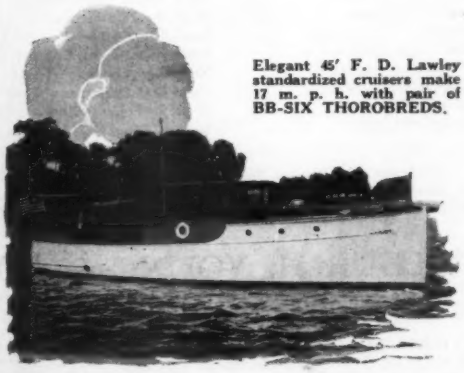
4 Cylinders

D	10-14 H.P., 2¾"x4"
AA	18-24 H.P., 3¾"x4½"
F	28-36 H.P., 4½"x5"
B	32-40 H.P., 4½"x5"
BB4	40-50 H.P., 4½"x6"
BB4 HS	45-70 H.P., 4½"x6"
Big Chief	50-60 H.P., 5" x7"
BC Special	75-90 H.P., 5¾"x7"

6 Cylinders

Arrow	40-80 H.P., 3¾"x4½"
BB6 MD	50-80 H.P., 4½"x6"
BB6 HS	80-110 H.P., 4½"x6"
BBSp6 MD	75-100 H.P., 5" x6"
BBSp6 HS	100-150 H.P., 5" x6"
Big Chief Six	85-110 H.P., 5" x7"
BCSp6	110-150 H.P., 5¾"x7"

Immediate Deliveries on All Sizes



Elegant 45' F. D. Lawley standardized cruisers make 17 m. p. h. with pair of BB-SIX THOROBREDS.

RED WING MOTOR CO.
RED WING, MINN., U. S. A.

Eastern Distributors: W. H. Moreton Corp., 1043 Commonwealth Ave., Boston; Verrier, Eddy Co., 222 E. 42nd St., New York City; W. E. Gochenaur Mfg. Co., 631 Arch St., Philadelphia; F. B. Eisenbrandt, Foot of Light St, Baltimore; Hutchinson's Boat Works, Alexandria Bay, N. Y.

TRADE SEAGOER MARK

The Fast Cruising Runabout . . . . A New Type Boat

SEAGOER combines the best features of runabout and cruiser in a fast seagoing boat that meets more service requirements and offers greater variety and versatility of entertainment than any craft you ever saw. Be sure to try the SEAGOER before you buy any boat.

Length 26 ft.; beam 8 ft. 6 in.; draft 30 in. Hull painted in attractive color combinations. Mahogany trim.

Forward cockpit seating four. Autotype drivers' seat for three. Rear cockpit seat for five. All fitted with leatherette cushions in attractive colors.

Full automobile control. Electric starter, generator and lights.

Light, cool cabin with 5 ft. 9 in. headroom. Two 6 ft. 2 in. spring berths. Hanging space for clothes. Lockers under bunks.

Separately partitioned toilet and lavatory. Galley with two-burner Alco Yacht Stove—dish shelves—sink drain board—ice box—closet for pans. All government equipment necessary.

Can be equipped with two extra berths, windshield, combination flying awning and cockpit cover or with standing top, on special order.

A Runabout in Speed and Control, with the Living Accommodations of a Cruiser

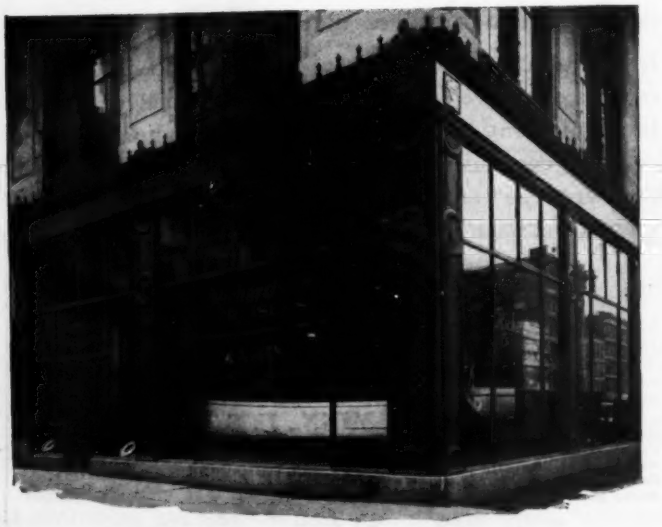
POWERED WITH—

GRAY 6 cyl., 40-Horsepower—Speed 13 miles per hour....Price $2,950
GRAY 6 cyl., 72-Horsepower—Speed 17 miles per hour....Price $3,250
GRAY 8 cyl., 100-Horsepower—Speed 22 miles per hour....Price $3,575
Larger powers giving speeds up to 32 miles per hour on special order.

F.O.B. Plant

Write for Plans, Specifications, and Complete List of Equipment

Runabouts, Cruisers, Outboards, Sail Boats, Canoes



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Among the fine boats and marine accessories we represent in New York are—

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Seagoer Cruising Runabouts	Century Kid Outboards
Fleetwing Cruisers	Cute Craft Outboards
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Star Class Sailboats	Reaber Outboard Cruisers
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Visit our big Marine Salon and see the splendid display of boats we have here. Don't delay if you want early delivery.

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MARINE SALON

262 WEST 57TH STREET (near Broadway), NEW YORK, N. Y.
phone: Circle 2580-2581

Advertising Index will be found on 3rd last page

A Whale of A Good Boat!

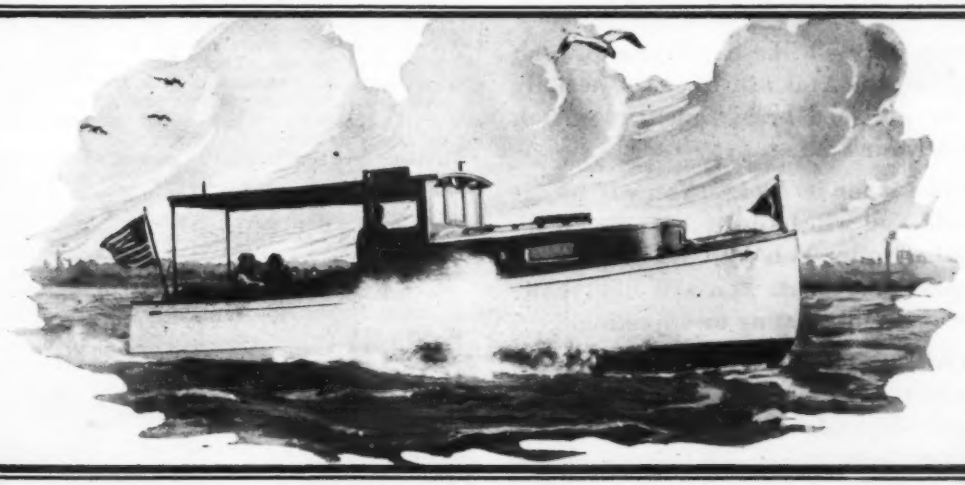
Care, and skilled craftsmanship—developed out of years of fine boat building—have built into the Cruisabout twenty-eight feet of unparalleled value!

The Cruisabout has been built with your pleasure and comfort first in mind. Her hull is smartly designed, so that you may be justly proud of it! Her cockpit is a roomy one! Her cabin is a marvel of compactness.

Four comfortable berths act as lounges by day. The toilet room is completely fitted, with toilet, wash bowl, and large dresser. Full length clothes lockers store your clothing without crushing. Real meals can be prepared in the galley without crowding or discomfort.

Powered by the sturdy and dependable Gray 6-40 engine, the Cruisabout will idle leisurely, or go steadily ahead at full speed, at your pleasure.

Write for the Cruisabout folder, describing this amazing boat in full detail. Read it! And then realize what a value the Cruisabout represents at $3585!



RICHARDSON BOAT COMPANY, Inc.

374 Sweeney Street, North Tonawanda, N. Y.

Cruisabout Display Rooms In Principal Cities

NEW YORK
Wilbur H. Young & Co.,
262 West 57th street

AMITYVILLE, L. I.
F. D. Homan,
78 Riverside

WASHINGTON
Washington Motor Boat
Sales Agency
1344 Connecticut ave., N. W.

BOSTON
Noyes Marine Sales Co.,
1037 Commonwealth ave.

PHILADELPHIA
Marine Equipment &
Supply Co.,
116 Walnut street

CHICAGO
A. M. Deering,
1642 Monadnock bldg.

DETROIT
Richardson Detroit Boat Co.
3169 E. Jefferson avenue

GALVESTON, TEXAS
Electric Supply Co., Inc.,
210 21st street

Richardson
MASTER *Cruisabout* 28′

England Challenges for Harmsworth Trophy

(*Continued from page* 132)

They have hand wheel control through a bevel reduction gear, and the wheel is specially sprung so as to take up the vibration which is anticipated with the machine at the speeds expected.

The boats have an oil tank with a capacity for 5 gallons and both boats are fitted with foot operated cone friction clutch.

As the rules of the race necessitate that any starting apparatus used is to be carried on the boat, the two stroke engine used for starting the Napier engine is carried behind the pilot's seat, a trap door making it easily accessible.

Estelle I, the boat with the direct drive to the propellor, is 26 feet in length and the beam 5 feet 6 inches, and the step of this boat is straight athwart the boat. It is constructed on the sawn frame principle, double diagonal top, side and bottom planking with oil fabric interlining is laid on to longitudinal stringers mounted on the sawn frames. Estelle II, that is the one fitted with the gear box, has a length of 21 feet and a beam of 6 feet. The step of this boat is Veed and rather deeper than in the other boat. This boat is constructed of double diagonal top, side and bottom planking in American elm timbers with oil fabric interlining.

The Napier engine in both boats is bolted to chairs fixed to the longitudinal bearers which run the full length of the boat. In Estelle II the same bearers carry up forward the gear box.

Each boat, according to the rules of the race, must carry a crew of two. In Estelle I and II they are seated low down with only their heads showing above the side of the boat. To reduce resistance the area at the back of the heads of the pilot and mechanic is faired off in a similar fashion to that employed with fast racing aircraft.

To give some indication of the care and thought that has been given to the construction of these boats, the department in which they have been built has maintained at an even temperature of 60 degrees, day and night. This has been necessitated by the fact that the wood employed is so thin and light that any atmospheric changes would effect its efficiency until the boat is completed.

The thin skin planking employed has been tested to withstand a water pressure of 50 pounds per square inch. Stresses not expected to be met with in the actual race, even at the high speeds anticipated.

As the race is run on fresh water in the river at Detroit these boats will be used on fresh water only and it has been decided to take them to Windermere and test them over a speed course of not less than one mile. They will be leaving Cowes for Windermere during the first week in June, and stringent trials will be carried out to test to the full the possibilities of these remarkable craft. Miss Carstairs has notified her intention of carrying out the first trials herself.

The boats have been built in the greatest secrecy. Every effort has been made to insure that no indication of the type of boat being constructed should leak out until they were actually ready for their trials. S. E. Saunders has had the various parts made in separate departments of his factory and only one or two employees have been aware of the complete details of the boats.

Messrs. S. E. Saunders, Ltd., have themselves designed the gearbox and clutch as used in the boats so that two firms have been responsible for Miss Carstairs' boats, Messrs. S. E. Saunders, Ltd., and D. Napier & Son, Ltd., although the E. N. V. Engineering Co. were responsible for machining certain parts of the gear box.

The Napier Racing Engine

The engine which has been selected by Miss Carstairs to be fitted to the boats being constructed for her is the Napier racing Lion.

It is this type of engine which was fitted to the aircraft which won for Great Britain the Schneider Trophy last year and holds the World's air speed record over 100 kilometers of 283.313 m.p.h.

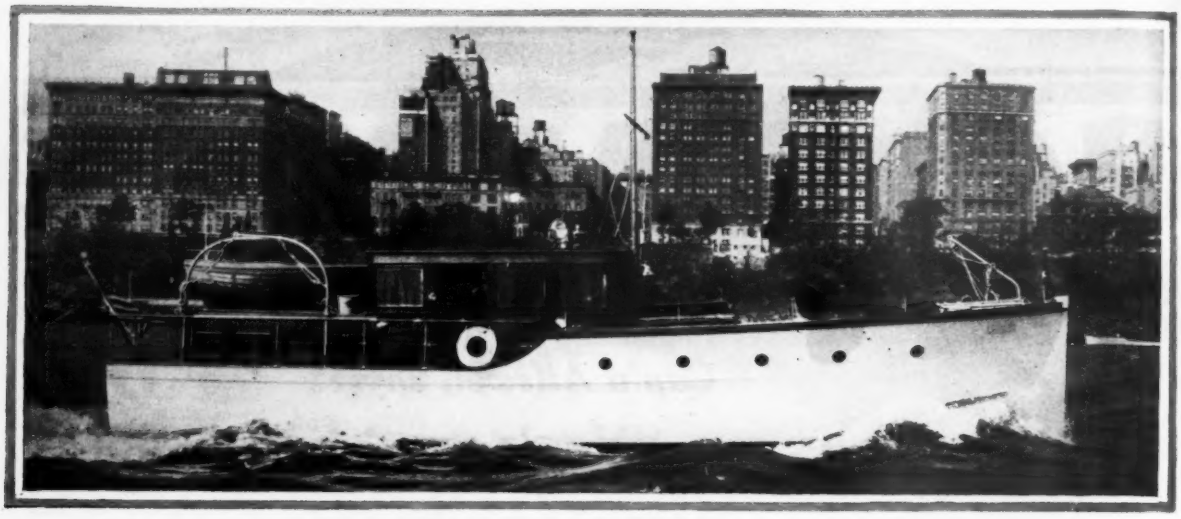
The same engine was used in Captain Malcolm Campbell's car when he set up a World's speed record over one mile of 206.95 m.p.h.

This engine is a development of the Napier aeroplane engine which has had notable success fitted to aircraft of the Royal Air Force and the air forces of many other governments.

As with all the Napier Lion series, this racing engine has twelve cylinders arranged in three blocks of four cylinders each. The bore is 5½ inches and the stroke 5⅛ inches. This latest Napier has the exceptionally high compression ratio of 10 to 1.

The overall dimensions have been considerably reduced. The height is 2 feet 10½ inches, width 3 feet 2½ inches, and length 5 feet 6¼ inches. The whole area of this engine, therefore, has been reduced making it remarkably compact.

(*Continued on page* 140)

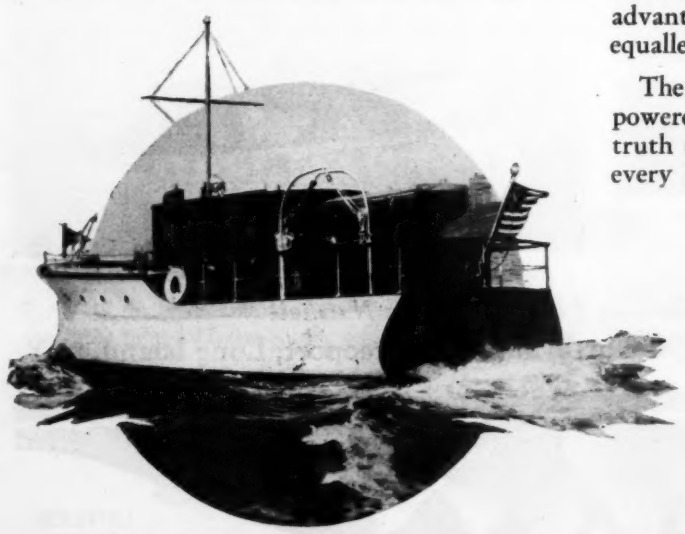


Humphreys 39-ft. Diesel Cruiser, "Idono," powered with 6-cylinder Model U Cummins engine. Owned by Commodore C. DeForest Cummings of the Buffalo Yacht Club.

CUMMINS DIESELS

Make Good Boats Better

A SUBSTANTIAL seaworthy cruiser is a good boat to start with, and it's a better boat when provided with the reliability, safety and operating economy of a modern Diesel power plant. Using heavy oil for fuel instead of gasoline reduces fire hazard and lowers insurance rates materially. The fuel cost is only one-third to one-fifth as much per mile, and the boat can cruise three times as far on one filling of the fuel tanks.



The Model U Cummins Diesels are the first successful small Diesel engines designed especially for medium size cruisers and yachts. They are medium high speed engines of approximately the same size and weight as gasoline engines of the same power-rating. There is not a single advantage of a gasoline cruiser engine that is not equalled or bettered by the Model U Cummins.

The performances of the boats now in service powered with these new engines have proved the truth of every claim made for them. In fact every boat owner, builder and naval architect who has installed one has expressed enthusisatic surprise at the smoothness of their operation, their easy starting, freedom from odor, simplicity of control, flexibility, reliability and economy after he has had an opportunity to observe the engine in actual service.

THE CUMMINS MODEL U

1 cyl.	4½" x 6"	8 h.p. at	800	r.p.m.
2 cyl.	4½" x 6"	16 h.p. at	800	r.p.m.
3 cyl.	4½" x 6"	24 h.p. at	800	r.p.m.
4 cyl.	4½" x 6"	32 h.p. at	800	r.p.m.
6 cyl.	4½" x 6"	60 h.p. at	1,000	r.p.m.

Other sizes up to 105 h.p.

Advertising Index will be found on 3rd last page

The Ideal Auxiliary Power

CUMMINS Model U Diesels are invading the field of auxiliaries and power yachts just as they have won the preference among owners and builders of cruisers. Several new yachts of this type are joining the fleets of the leading yacht clubs this year. The same qualities that make Diesel engines most desirable for large yachts, cruisers and cruising houseboats are appreciated by experienced yachtsmen who want simplicity as well as dependability in a power plant.

Write today for details and prices.

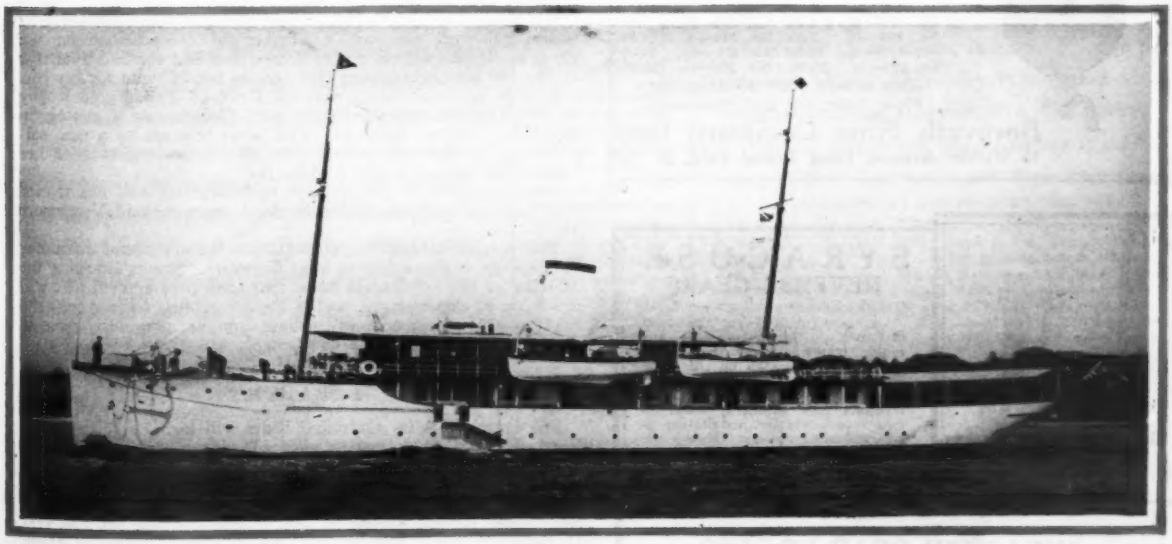
60-ft. Schooner "Nina." Powered with 4-cyl. 32 H.P. Model U Cummins Diesel. Designed by Burgess & Morgan, New York, for Paul Hammond, Esq., of the New York Yacht Club.
A contestant in the Transatlantic Race to Spain for the Queen Victoria Cup.

CUMMINS ENGINE COMPANY, Inc.

Columbus, Indiana

New York: Sutter Bros., 47 Great Jones Street. (Marine)
Smith-Meeker Eng. Co., 123 Liberty St. (Generators)
John Reiner & Co., Inc., 389 Church St. (Industrial)
Washington, D. C.: Ross L. Fryer, Transportation Building
Terminal Island, Cal.: Marine Engine & Supply Co.
Miami, Fla.: P. K. Hexter, Southern Sales Mgr., Box 2945
Miami, Fla.: J. N. Vernam, 169 N.W. South River Drive
Rockport, Tex.: Roberts Boat Works
Seattle, Wash.: S. V. B. Miller, 72 Marion Street
Baltimore, Md.: Mahon & Gall, Inc., Pratt & Gay Sts.
Guaymas, Sonora, Mexico: A. A. Leleviery

Cummins Engines will be on exhibition at the Pacific Southwest Exposition, Long Beach, California, July 27th to August 30th, inclusive.



182-ft. Diesel Yacht Seaborn, owned by Commodore R. F. Howe of Glen Cove, Long Island. Equipped with a 30 K.W. 6-cylinder Model U Cummins Diesel Electric Generator.

England Challenges for Harmsworth Trophy

(*Continued from page* 136)

Yet into this small area, by genius of design and skilled workmanship, is a unit developing at 3,300 r.p.m., 875 h.p.—and the engine only weighs complete 835 pounds. For every horsepower actually developed .954 lb. of weight.

The oil consumption of the engine is approximately three gallons per hour, while it consumes 50 gallons of fuel every hour.

The British International Trophy for Motor Boats

The British international trophy for motor boats was originally known as the Harmsworth Cup. It is a bronze trophy and was presented by the late Lord Northcliffe (then Sir Alfred Harmsworth) in 1903, for international competition to be competed for annually. Each country can enter a maximum of three motor boats. The course must not be less than thirty or more than forty nautical miles and in arranging the course any angle of less than 120° must be avoided. The length of each round or lap must not be less than five or more than ten nautical miles.

The first race took place at Queenstown and since then in the country holding the cup for the time being.

Previous winners and speeds are given below:

Previous Winners and Speeds

Year	Place	Name of winning boat	Owner	Country	Speed Knots	Speed Land m.p.h.
1903	Queenstown	Napier I	S. F. Edge	England	16.96	19.53
1904	Solent	Trefle-a-quatre	E. B. Thubron	France	23.13	26.53
1905	Arcachon	Napier II	S. F. Edge	England	22.61	26.03
			Lord Montagu of Beaulieu and Mr. L. de Rothschild			
1906	Solent	Yarrow Napier		England	13.44	15.47
1907	Solent	Dixie I	E. J. Schroeder	America	27.6	31.78
1908	Huntington Bay, L. I.	Dixie II	"	"	31.347	36.09
1909		No Race				
1910	Huntington Bay, L. I.	Dixie III	K. F. Burnham	America	31.3	36.04
1911	"	Dixie IV	Messrs. Melville Herksher & Burnham	"	34.98	40.28
1912	"	Maple Leaf IV	Sir E. Mackay Edgar	England	37.5	43.18
1913	Osborne Bay	"	"	"	49.02	56.44
1914 to 1919		No Race				
1920	Osborne Bay	Miss America	Garfield A. Wood	America	53.42	61.51
1921	Detroit	Miss America II	"	"	51.89	59.75

Miss Carstairs' Motor Boat Career

It is only during the last few years that Miss M. B. Carstairs, whose pluck and enterprise enables Great Britain to be represented in the race for the British International Trophy race for motor boats for the first time since 1921, has seriously taken up motor boat racing, yet in this short period she has achieved considerable success, and holds many trophies.

Her first experience of motor boat racing was in 1925 when, by skilful piloting, she won a number of competitions on the Riviera. It was during one of these races that she had a narrow escape, the boat overturning and causing her to swim for her life.

In 1926 her boat Newg won the Duke of York's gold trophy on the Thames between Putney and Chiswick in a contest in which five nations competed. This same boat set up a new official world's speed record of over 39 knots for boats of her class. This record is still held by her.

Miss Carstairs is also a keen yachtswoman, and has owned four boats—Newg, the 15-ton Sonia, Vergemere and Vergemere II.

The present attempt to place Great Britain ahead in motor boat speeds, is due solely to Miss Carstairs. She is financing the building of the two British boats that have been entered and will drive one of them herself, and if she accomplishes the speeds she expects, her achievement will eclipse anything previously done in motor boat racing by man or woman.

The Crews

The crews of Miss Carstairs' boats will be:

First—Miss M. B. Carstairs, pilot; J. Harris, engineer.

Second—Capt. Marshall, pilot; F. J. Hyde Beadle, engineer. (Mr. Beadle is the designer of Miss Carstairs' boats. It is interesting to note that Mr. Beadle's father, C. H. Beadle, was responsible for the design of one of the entrants for the first Harmsworth trophy race held in 1903—Durendal owned by Frank Beadle.)

Third—Arthur Bray, pilot. Engineer to be selected.

(*Continued on page* 144)

..and She, the mate and the midshipmite-

UNLESS you have spent your summers afloat, you cannot possibly know the wonderful enjoyment of it all. Lolling on deck after a plunge; exploring some quaint fishing village; slipping through cool, blue waters with only the far horizon to bound you—and for a helmsman, sixteen or sixty, the girl of your heart's desire—the most remarkable girl in the world.

This is your floating summer home. Go where you like, when you like. Cook aboard, eat aboard, sleep aboard. You are cool, you are sea-tanned, you are free, you are utterly happy under these comfortable conditions.

There are no traffic jams to hamper you, no heat-ridden hotel rooms to stifle you, no insects to pester you. Here is true privacy, abundant health, thorough enjoyment, and complete relaxation to assure your perfect contentment.

Private Note to Mariners

This advertisement is published so that you, who truly know the lure of blue water, may tear it out and give it to someone who is less fortunate; someone who doesn't know that, "I never was on the dull, tame shore, but I loved the great sea more and more".

It is not too late to get aboard a cruiser for this summer. Naturally you'll want an A. C. F. which, of all cruisers, is greatly to be preferred. Built in many types and sizes; every one trim, staunch and seaworthy.

Write today for the "Burgee Book"

A. C. F. NEW YORK SALON, 217 WEST 57TH STREET
AMERICAN CAR AND FOUNDRY COMPANY

BOSTON - Noyes Marine Sales Co., 1037 Commonwealth Ave.
PHILA. - Universal Service Motors Co., W. Broad & Wood Sts.
DETROIT - - - - - - - A. C. F. Salon, 500 E. Jefferson St.
CHICAGO - - - - - Ward A. Robinson, 58 E. Washington St.
CLEVELAND - - M. J. Shea, 1424 Lauderdale Ave., Lakewood
WEST PALM BEACH - - - C. P. Whitney, c/o Bryant & Gray
SAN FRANCISCO - - - - - - - S. C. Kyle, 427 Rialto Bldg.
WILMINGTON, DEL. - - American Car and Foundry Company

a.C.f.
cruisers

Advertising Index will be found on 3rd last page

England Challenges for Harmsworth Trophy

(*Continued from page* 140)

Particulars of Firms Responsible for the Boats and Engines

S. E. Saunders, Ltd.

Messrs. S. E. Saunders, Ltd., the designers and constructors of the boats for Miss Carstairs, have a large and complete factory at Cowes. For the last thirty years they have been designing and building speed motor boats. No other firm in Great Britain has had such a long and varied experience in motor boat construction.

It is interesting to note that one of the boats built by Messrs. Saunders and constructed some sixteen years ago, still holds the British speed record which it has set up each year for the past three years.

In 1903 Messrs. S. E. Saunders, Ltd., entered a boat for the British International Trophy race and in 1913 had the satisfaction of building a boat which recovered the trophy from America. In every race since 1903 a boat built by Messrs. Saunders has been represented.

D. Napier & Son, Ltd.

Messrs. D. Napier & Son, Ltd., the manufacturers of the engines for the boats, have been engaged on highly skilled engineering for over a century. They have become famous throughout this period for the high grade of work executed.

They have always been interested in high speed engines. Whether on the road, on water or in the air, Napier engines have always excelled when speed combined with reliability has been desired. Many speed records on land, sea and in the air have been obtained for Great Britain by the Napier engine in the past and of the three world records held by Great Britain in the air today, the two in the class with engines over 100 h.p. are held by machines fitted with the Napier engine.

The Royal Air Force selected the Napier engines for their high speed flights. The Schneider trophy race at Venice was won by this team at a speed of over 281 m.p.h.

Captain Malcolm Campbell's choice was this same type Napier engine. He accomplished what he set out to do—the world's land speed record at a speed of 206.95 m.p.h. Miss Carstairs has selected the same type engine.

The Napier racing engine is undoubtedly the most highly developed gasoline engine in the world.

Helps for Race Committees

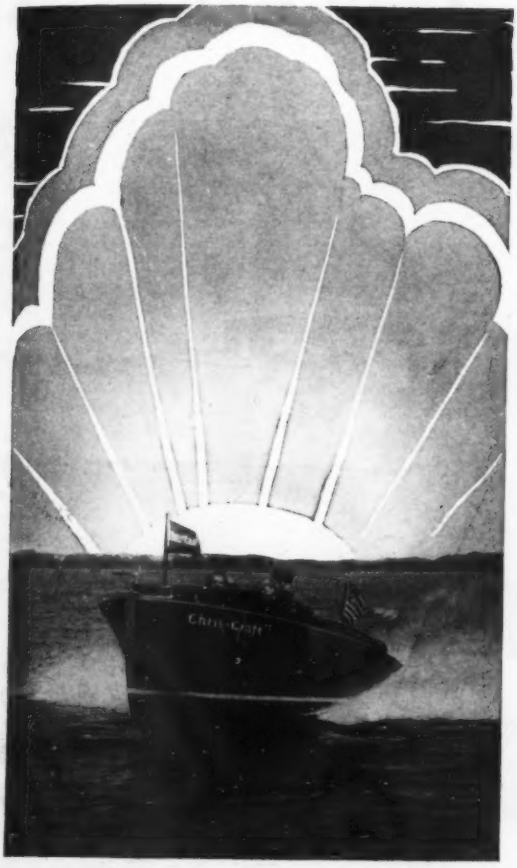
The American Outboard Motor Association has undertaken to supply a special set of regatta material to clubs and associations in its embership. In order to stage a successful regatta much paraphernalia is necessary of which the beginners in race handling know nothing. In order to make it easier for these officials a complete collection of posters, printed matter, blank forms, certificates and other items are being supplied. The posters are supplied in two sizes, both printed in four colors. Space is provided in which the local names may be inserted. The race instruction and rule books are also supplied in this way and are of great assistance to committees. Entry forms and owner's affidavit forms are included on one card and small badges for officials and contestants are also provided to distinguish officials from spectators. Attractive winners certificates printed in gold, blue and bronze are provided as well as score pads, timer's pads, and result sheets, all specially designed to suit the requirements of this sport. This entire equipment is supplied to clubs which join the association and additional material can be had from time to time as required.

A Floating Steel Breakwater

The Walsh-Bugbee Company of Trenton, New Jersey, builders of artistic steel floats and docks suitable for housing small runabouts and cruisers, are undertaking the construction of a large floating steel breakwater 200 feet in length, for Harrison Williams of Bayville, Long Island. This breakwater is to be anchored and secured in such a way that it will serve as a protection for the private landing of Mr. William's fifty mile an hour commuter, Whim III. Since the boat is required to make daily trips to and from the city, it is imperative that it be able to land under all weather conditions. The purpose of the breakwater is to shelter the landing so that the boat may be docked safely in the severest weather and protected against the roughest seas when moored at the dock.

Advertising Index will be found on 3rd last page

Chris-Craft



KERMATH

TWO famous names have long combined to serve the ends of exhilarating and dependable runabout performance. The Kermath 150 horsepower marine engine and the 26-foot Chris-Craft have won hundreds of sportsmen to this new form of fast and luxurious travel afloat. The Kermath "150" provides a sensational 40-mile clip for those who want the thrilling delights of such boating speeds, combined with the positive certainty of sustained performance.

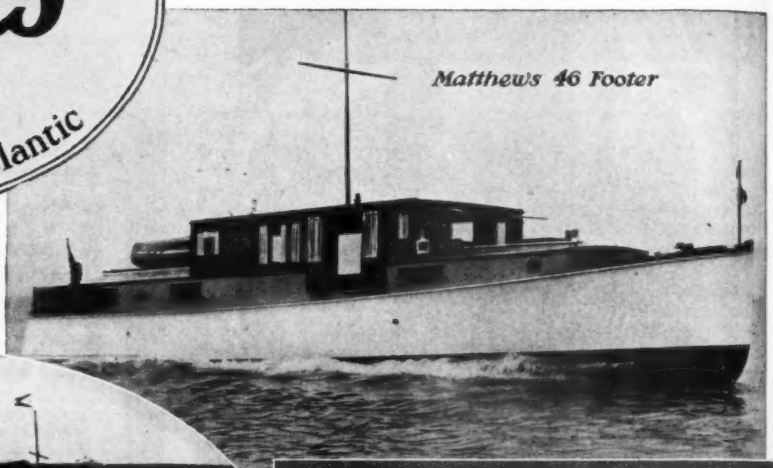
KERMATH MFG. COMPANY
5879 COMMONWEALTH AVE., DETROIT, MICH.

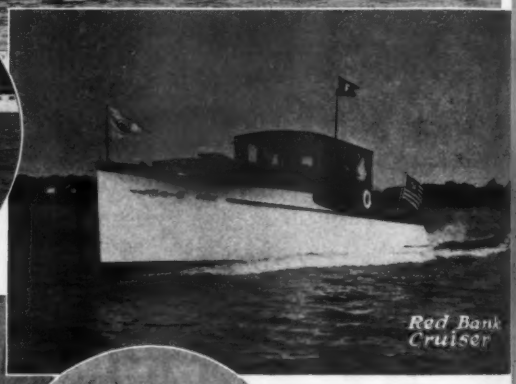
"A KERMATH ALWAYS RUNS"

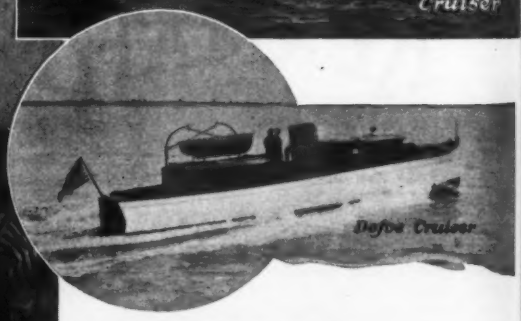
A New

Scripps

The Motor That Crossed the Atlantic







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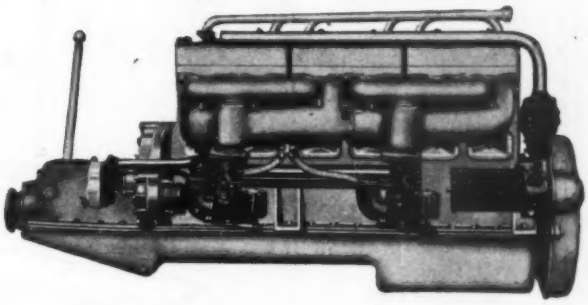
...w Improved Cruiser Motor

THE new improved cruiser type Model G-6 SCRIPPS engine bids fair to parallel the exceptional success and wide popularity won by the high speed model in runabout service.

Only a few of the many typical installations by cruiser builders of national prominence are illustrated to show the wide range of usefulness of this particular model.

Unusual compactness adapts it to the fast 28' or 30' cruiser—reserve power, stamina, and the use of twin screw installation provide adequate power for cruisers up to 100 feet in length. Sturdy reduction gears further its scope of service.

The Model G-6 from its earliest introduction has been recognized as an outstanding mechanical achievement. This splendid engine is now made even better through improvements and refinements —a strong, quiet oversize reverse gear of our own design and manufacture—flywheel enclosures—iron oil pans—and many other excellent features, all described in the new catalogue.



MODEL G-6 CRUISER TYPE MEDIUM DUTY 100 H.P.; ALSO MANUFACTURED IN 150 H.P. HIGH SPEED.

OTHER TYPES AND MODELS FOR EVERY CLASS OF BOATING SERVICE, 10 TO 200 H.P.

Scripps Motor Company

5819 Lincoln Ave., Detroit, Mich.

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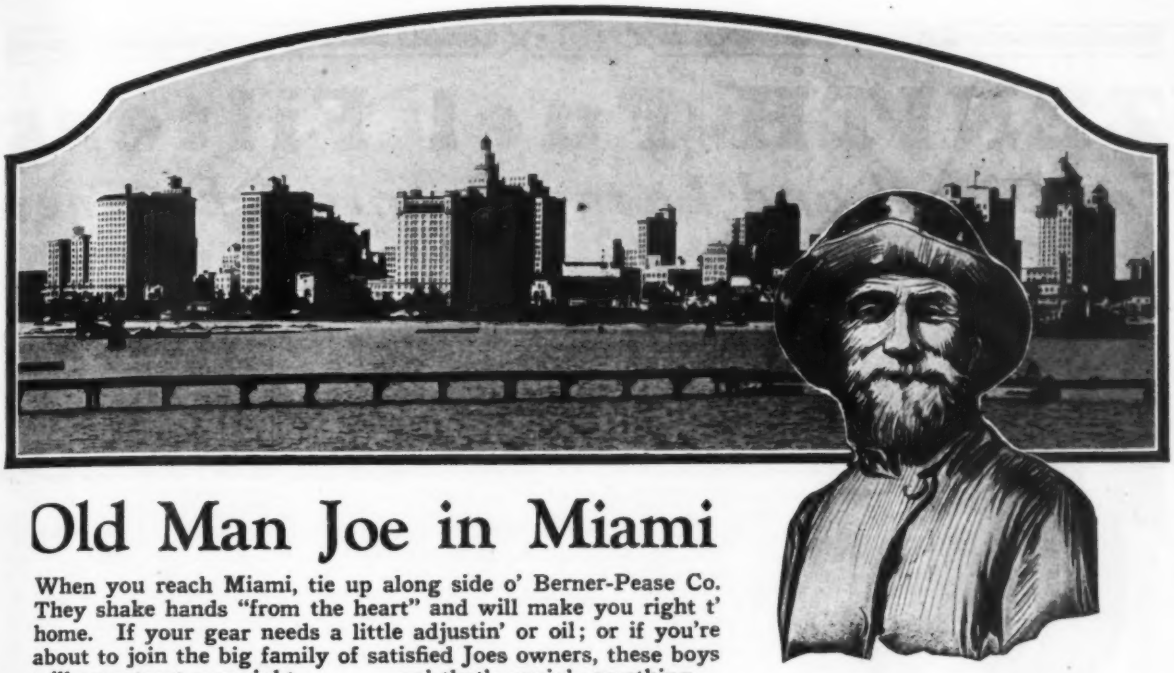


Old Man Joe in Miami

When you reach Miami, tie up along side o' Berner-Pease Co. They shake hands "from the heart" and will make you right t' home. If your gear needs a little adjustin' or oil; or if you're about to join the big family of satisfied Joes owners, these boys will sure treat you right . . . . an' that's sayin' something.

Full Speed Ahead to Full Speed Astern No Stalling!

Joes Gear backs up any craft . . . . from speed boat to barge . . . . at 88% of engine speed. Makes handling lots easier in swift water, among heavy traffic or around crowded docks. When forty of the leading engine builders use Joes Gear, you'll have smooth going if you follow their lead.

Sales + Service in 30 ports

Write now for complete information about Joes Gear. We'll send bulletin 27A and a vest pocket copy of "Rules of the Road."

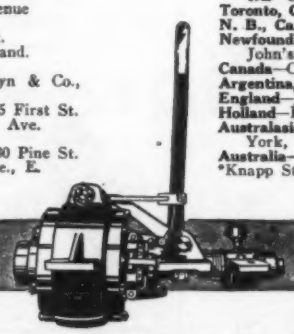
The Snow & Petrelli Mfg. Co., 19 Fox Street, New Haven, Conn.

JOES FAMOUS REVERSE GEARS

Reverse 80%-88% of Motor Speed

Sales and Service

New York, N. Y.—Sutter Brothers, 47 Gt. Jones St., Service Station.
Boston, Mass.—Gray-Aldrich Co., Inc., 6 Commercial Wharf.
Philadelphia, Pa.—W. E. Gochenaur Mfg. Co., 631 Arch St.
Baltimore, Md.—Mahon & Gall, Inc., Pratt & Gay Sts.
Washington, D. C.—Barber & Ross, Inc., 11th & G Sts., N. W.
Norfolk, Va.—Gas Engine & Boat Corp., Ft. First St.
Miami, Fla.—Berner-Pease Company, N. E. Second Avenue
Mobile, Ala.—Marine Supply Co.
New Orleans, La.—Arthur Duvic's Sons, 130 Chartres St.
Galveston, Texas—Galveston Marine Supply Co., 2007 Strand.
Wilmington, Calif.—Fellows & Stewart, Inc.
San Francisco, Calif.—Johnson, Joseph & G. M. Josselyn & Co., 56 Sacramento St.
Portland, Ore.—Oregon Marine & Fisheries Supply Co., 105 First St.
Seattle, Wash.—Pacific Marine Engine Co., 906 Western Ave.
Chicago, Ill.—W. L. Masters & Co., 800 N. Clark St.
St. Louis, Mo.—William Grossmann Boat & Motor Co., 1630 Pine St.
Detroit, Mich.—Henry H. Smith & Co., 334 Jefferson Ave., E.
Grand Rapids, Mich.—Michigan Wheel Co., 449 Market Ave., West.
Cleveland, Ohio—William F. Meier, 1220 Warren Road, Lakewood.
Clayton, N. Y.—St. Lawrence River Motor & Machine Co.
Rochester, N. Y.—Volney E. Lacy, Charlotte Station.
Vancouver, B. C., Canada—Hoffar-Beeching's Ship Yard, Ltd., 1927 Georgia St., W.
Toronto, Canada—A. R. Williams Machinery Co., 66 Front St., West.
N. B., Canada—T. McAvity & Sons, Ltd., 67 Water St., St. John.
Newfoundland, Canada—John Barron & Son, 341 Water St., St. John's.
Canada—Canadian Fairbanks Morse Co., All Branches.
Argentina, S. A.—Jose Banham & Sons, Peru 362, Buenos Aires.
England—J. King & Co., 10 Church Row, Limehouse E, London.
Holland—Fred J. Kemper, Korte Kade 200, Rotterdam.
Australasia—Melchoir, Armstrong, Dessau Co., 116 Broad St., New York, N. Y.
Australia—Acme Cycle Co., 355 Lonsdale St., Melbourne.
*Knapp St. between Ave. Y & Z, Gerritsen Beach, Brooklyn, N. Y.



REVERSE 80%-88% OF MOTOR SPEED

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The Staterooms are of Commodious Proportions

The Dining-room and the Living Saloon

Houseboat Comfort with Cruiser Speed

The "Lone Star", owned by Mrs. E. Henry Harriman and designed and built in 1927 by the Consolidated Shipbuilding Corporation, New York, is another one of the new-type designs made possible by Wright Typhoon Engines. One of the striking features is the large deck house, the forward end of which is used as a dining room, while the latter part is the living room.

The "Lone Star" is 81 feet in length, and the power plant consists of two Wright Typhoon Engines of 550 H. P. each, which give her a cruising turn of speed of 28-30 miles per hour.

The most effective designs in cruising houseboat and express runabout models for commuting at high speed where commodious quarters and plenty of passenger space is necessary have been made possible by Wright Typhoon Engines, the most conspicuously successful marine power plant in craft of these classes in American waters today.

WRIGHT AERONAUTICAL CORPORATION, *Paterson, N. J., U. S. A.*

Send for Bulletin No. 10-A

WRIGHT
Typhoon
A SUPERLATIVE MARINE
engine

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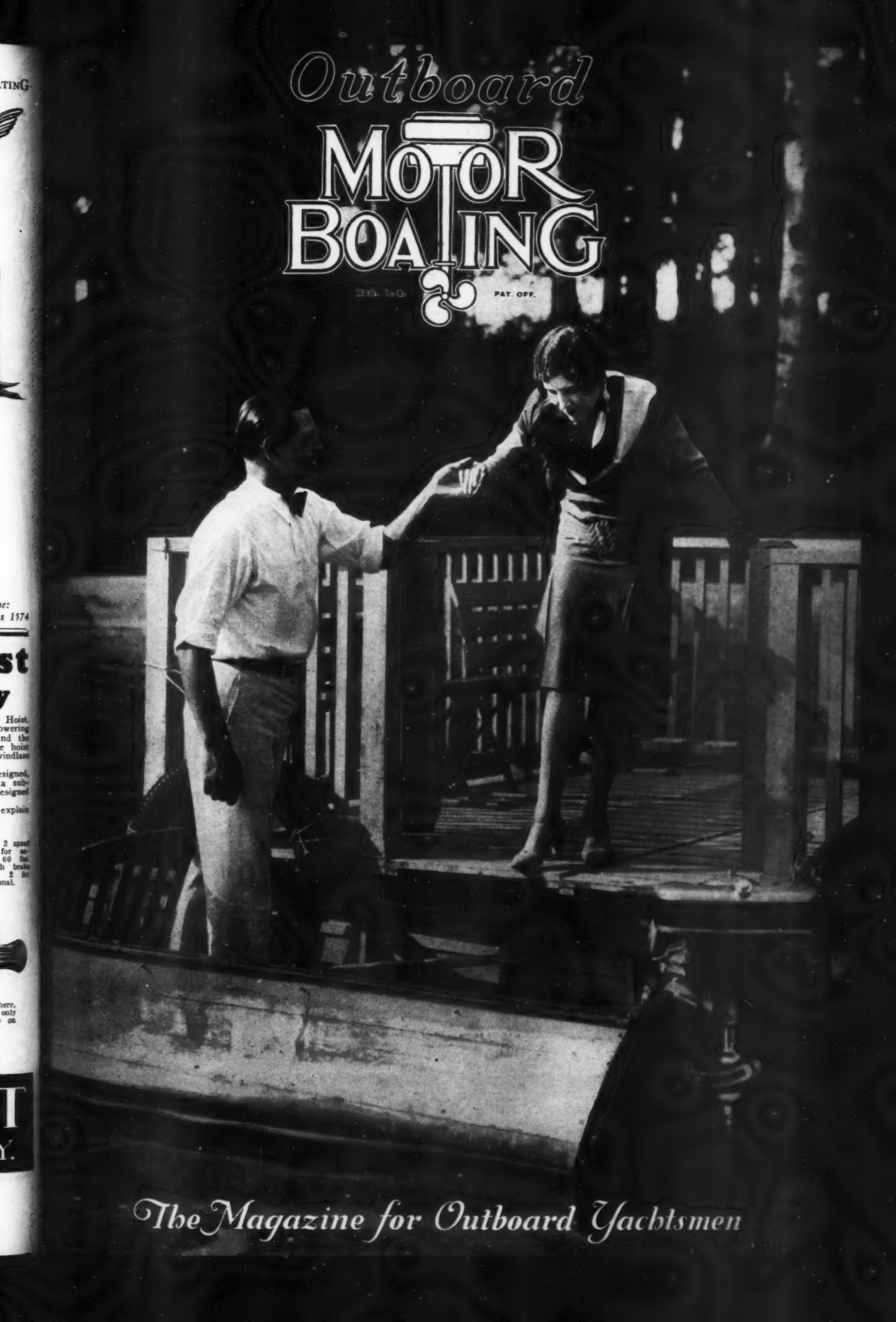

Outboard
MOTOR
BOATING
REG. U.S. PAT. OFF.
The Magazine for Outboard Yachtsmen

THE HOOTON SAFETY-PLANE

HAS WON THE UNQUALIFIED PRAISE OF ALL WHO HAVE SEEN OR DRIVEN IT. THIS REMARKABLE HULL IS NOW ACKNOWLEDGED TO BE THE ONE BEST OUTBOARD HYDROPLANE REGARDLESS OF SIZE OR PRICE!

Wherever it is seen in action the Safety-Plane is instantly recognized as being something decidedly different from the usual run of hydroplanes. There is a superiority of finish, of speed, of handling and load carrying ability, which have placed it unmistakably *in a class by itself*. Exclusive protected features in design of bottom and fin have produced these qualities.

Here is a sturdy mahogany hull which carries four adult passengers, comfortably seated, at breath-taking speed. Stripped for racing, it is the equal of any hydroplane built, and will run far ahead of the field when the going becomes tough. Portable on your sedan roof, the Safety-Plane does not need a boat house, and, above all, this hydroplane is *SAFE*. Drive one and see!

THE MILWAUKEE-CHICAGO MARATHON PROVED BEYOND QUESTION THE SUPERIOR STRENGTH AND ABILITY OF THE SAFETY-PLANE

READ THESE TELEGRAMS FROM OWNERS WHO RACED IN THIS SEVERE CONTEST

"Your Safety Plane a wonder for strength and rough water ability. Was leading entire field in Milwaukee Marathon and had covered worst stretch when forced out by broken steering wheel. Hull in perfect condition, dry and sound.

"NORMAN WENZEL."

"My new Hooton Safety-Plane, Baby Florida, performed wonderfully in the rough waters of Lake Michigan in the Milwaukee to Chicago marathon race, winning me two first and one second prizes in the Class B lap contests. Not a crack or screw loose afterwards. It certainly irons those big waves out.

"MALCOMB POPE."

FOR RACING IN CLASS A AND B
BUY THE *"MODEL R,"* SHOWN BELOW

This hull is conceded by all leading outboard motor builders to be the fastest and most controllable hull available. It is winning its races in rough water and smooth, with all makes of motors. A smaller Safety-Plane, it is able to give you the very last ounce of speed from these lighter engines.

WRITE OR WIRE FOR FREE LITERATURE TO

GORDON B. HOOTON
505 GRANDVILLE AVE., GRAND RAPIDS, MICH.

Advertising Index will be found on 3rd last page

Photographed by M. Rosenfeld

A fine type of family outboard runabout, the Laconia Sportster. It will carry several persons with speed and comfort

The Appeal of Outboard Motor Boating

THE average American is fond of sports. Many play golf, others turn their attention to tennis for their necessary exercise, some are partial to horseback riding, a few know the pleasures of sailing, others prefer baseball and so on down the whole list of sports. But we all love the great out of doors.

Strange as it may seem, the number of Americans that have given thought to motor boating is still remarkably small. Why this is, we cannot answer. Perhaps the fault is all ours and is due to the backwardness of the industry of a few years ago, compared with the motor car business. Perhaps it is because boating was not made easy to enjoy or perhaps those that should be attracted to this sport assumed that a slow motor boat was the most uncomfortable means of transportation, not to mention sport, that existed. The introduction of real speed has aided in correcting this impression and the improvements in design, appearance and comfortable riding qualities as well as perfections made in the power plants will go a long way toward impressing the American sportsman that motor boating is one of the country's major sports.

The outboard too will do more than its share in making the appeal stronger.

A few years ago the outboard was an unreliable, slow piece of mechanism. Today it is exactly the reverse. Speeds of better than 8 miles an hour a few years ago were the exception. The official record at this moment is better than 38 miles per hour. At least 40,000 outboards will be sold the current year.

The appeal of the outboard is reaching far and wide. It has no limits or boundaries. No better illustration of this could be given than to quote a letter from a prominent sportsman which was received in our office a few days ago. We print it in full.

"Until within the last four weeks, by impression of outboard motor boating, formed from observation on land, was a vision of somewhat speedy, noisy and obviously uncomfortable bumping over the water in a floating bath tub of unattractive appearance. This spring, a mahogany runabout with forward and after cockpit, upholstered cushions, and completely equipped with high grade fittings stirred my interest to the point of somewith superficial inspection. I could appreciate the beauty of its lines and the completeness of its appointments but my interest in outboard motor boating was still negative and I was inclined to smile inwardly at the volubly expressed enthusiasm of its devotees.

"Then came a warm and sunny spring afternoon. There was a sparkling ripple on the lake and one of these outboard cranks was speeding in circles around the lake in the graceful outboard runabout that had previously attracted my attention. An invitation to ride was extended and accepted. Out in the lake the operator opened the throttle and we seemed to be flying across the surface of the water. My first sensation was of remarkable speed; my next sensation was of absolutely comfortable riding and then my fingers itched to drive the boat myself. Perhaps this desire communicated itself

(*Continued on page* 174)

Photographs by Underwood & Underwood

The Mullins Sea Hawk with its crew driving through the gale in the Chicago-Milwaukee outboard race which it won

Girl *Wins* Strenuous Contest

An Outboard Motor Boat Race of Ninety-six Miles from Milwaukee to Chicago with Intermediate Stops Proves Too Much for Many Contestants, as Only Eight Finished the Run

ON June 2nd, the American Outboard Motor Association under the guidance of Dick Pope, the Executive Vice-President of the Association, staged one of the most unique and important outboard motor boat events which the middle west has yet seen. It took the form of a race from Milwaukee to Chicago with intermediate stops or controls at Racine, Kenosha, Waukegan and Wilmette, the total distance being approximately 90 miles. Stops of about an hour's duration were allowed at the controls, which feature gave the contestants sufficient time to refuel and a certain period of rest. This feature was much appreciated by the contestants.

With Dick Pope as chairman of the committee in charge, the entire arrangements were carried out as scheduled. Assisting Mr. Pope on the committee were J. W. Sackrider, James Peasley, of Chicago; A. T. Griffith, of Peoria, Illinois; John Robinson, of Cleveland, and C. F. Chapman, editor of MoToR BoatinG, New York. G. C. Gillies, of the Elgin National Watch Company, of Chicago, acted as official timer and L. W. Kidwell as scorer.

The Evinrude Motor Company and the Elto Outboard Motor Company furnished a dinner to the contestants at Milwaukee Yacht Club the night before the start and the Johnson Motor Company was host at a luncheon served at Waukegan.

The Coast Guard, under the supervision of Captain William Kincaid, of Milwaukee; Captain John Olander, of Racine: Captain Otto Fricke, of Evanston, and Captain William J. McGraw, of Kenosha, were in charge of patrol and with several airplanes furnished by the government, saw to it that no danger befell the contestants. O. W. Miller, of the Gar Wood, Inc., organization of Chicago, furnished one of his 28 foot sedan type runabouts which accompanied the race committee for the entire course from Milwaukee to Chicago.

Miss Mary A. Richardson who drove the winning boat most of the way, with the trophies which were presented at the finish

Some fifty boats started from Milwaukee about 10 A.M. of the morning of June 3rd. At Racine, the first stopping point, about 24 miles from the start, 41 boats were checked by the timers. At Kenosha, 11 miles further south, 36 craft reported. At Waukegan, 31 were timed. At Wilmette, eleven boats checked in and when the finish line was reached, there were eight boats in the running.

Boats of all descriptions and types started. The majority of the hulls were out and out racing craft with single step underbodies. The weather encountered was that of an average day on Lake Michigan. Most of the way it was quite rough going for the little craft, but in no instance could it be said that the Lake was rougher than average. At the start, the wind was light from the north which gave the racers a following sea on the first leg to Racine. It was much smoother going between Racine and Kenosha, but on the run from Kenosha to Waukegan the wind veered around to the eastward, which gave the racers a beam sea.

(*Continued on page* 176)

Outboard Record Goes to 38.436 M. P. H.

New American One-Mile Class C Amateur Mark Set Up by Firefly II in American Power Boat Association Sanctioned Race at Balboa, California

CALIFORNIA has been a center of outboard racing interest for the last few months and record after record has been made and broken there. One of the most recent attempts was that of Charles Holt, Los Angeles, who drove a little 14-foot step hydroplane up and down a one-mile course at the astonishing rate of 38.436 m. p. h., as the average of six trial runs. The timing for this run was done by stop watches in the hands of six skillful officials while the signal for the start or finish of a run was transmitted from one end to the other of the mile by electrical devices. The attempts at this record are prompted by a beautiful trophy which has been offered by the Pacific Southwest Exposition. This trophy is a figure of Winged Mercury in sterling silver and bronze and about three feet in height. It is offered for the fastest mile made in a 30 cu. inch free-for-all class between the dates of June 3rd and September 3rd and under the American Power Boat Association rules. All events for this trophy must take place in Southern California waters and under the sanction of the Association. Visiting drivers will have an opportunity to compete for this trophy at the regatta of the Southern California Yachting Association August 4th to 12th which will be a part of the boating program at the Exposition.

The record, which was set up on June 3rd, was made over a carefully surveyed statute mile which was laid out by R. L. Patterson, the city engineer of the city of Newport Beach. He certifies that monuments were erected at a mile and half mile points and that the course is located parallel to the U. S. bulkhead lines as established. The timers were in close agreement on each of the six runs and the mean of the speeds established was 38.436 miles as mentioned above. The individual speed for each single mile are as follows: first, 38.626; second, 38.503; third, 38.421; fourth, 38.544; fifth, 38.186; sixth, 38.339. It will be noticed that the fifth run was the slowest and the first run the fastest. The difference between them, however, being less than a half mile per hour. The officials who functioned at this trial were O. K. Hunsaker as chairman of the race committee with George L. McClelland, Emil Arup, Harold Nielsen, Paul W. Hiller, A. L. Bobrick and O. K. Hunsaker handling the watches. The operators at the keys of the electrical transmitter were W. P. Lunkert and Lee G. Symington.

The little boat used by Mr. Holt was built by Fred Ashbridge, Wilmington, California, and was driven by a stock Class C Evinrude outboard engine. The owner and driver of the boat, Charles Holt, tuned his equipment personally and from the speed established it seems he did a very good job.

A. P. B. A. Rules for Lake Calhoun Races

A series of races for outboard motor boats which are to be held on Lake Calhoun by the Calhoun Yacht Club will be run strictly according to the racing rules of the American Power Boat Association. The course which is to be used is one of long standing and the location on the turning points is constantly checked by the surveyor for the club. The course is plotted on the ice each winter and ranges established which permit of relocating the marks very quickly. Other officials function at this regatta are also approved by the A. P. B. A. so that should any records be established it will be possible to claim credit for them as all rules in this regard are to be followed strictly.

Photograph by Ray E. Chapin

Firefly II, the fast little Pacific Coast hydroplane powered with an Evinrude engine which Charles Holt drove to a new one-mile time-trial record

Photograph by M. Rosenfeld

J. E. Wilkinson fills up the tank of his pet Lockwood engine with a good mixture of fuel and oil

Lubrication *for the* OUTBOARD Engine

An Interesting Discussion Which Shows the Necessity for Care in Selecting a Lubricating Medium for Racing Engines

PROBABLY nothing of recent occurrence has served more strongly to illustrate the rapidly growing importance of the outboard field than the development of specialized lubricants for these sturdy little motors. In the past outboard owners used oils of various types and kinds, just as up to a year or so ago they used whatever craft—rowboat or otherwise—happened to be handy. But with the demand for real efficiency in the outboard field, there came the specialized hull, specialized accessories, and now specialized lubricants.

In developing Outboard Special, a typical example of the specialized lubricant, made by Duplex, the engineers concentrated on the racing field, knowing from experience that racing is the supreme proving ground. In racing efficiency—or the lack of it—is quickly brought to light. In striving for maximum power and speed on the race course, the engineers brought out, tested and rejected eight different experimental oils. Not until the ninth oil was tried out was maximum efficiency attained.

During the period of their research, the Duplex engineers discovered several fundamentals vitally affecting outboard engine performance. Probably the most interesting fundamental brought to light deals with the question of gasoline dilution. By this is not meant oil dilution, but quite the reverse—the dilution of gasoline by the oil. As everyone knows, all these motors (with one exception) are lubricated by mixing the oil with the gasoline. Hence the mixture fed into the combustion chamber is not simply a vapor of gasoline and air, but a vapor containing lubricating oil as well.

Years ago a very, very small percentage of oil was added to the gasoline. Then came the start of the trend leading to the present-day engine—the demand for high power, high speed and greater efficiency without added weight. That meant higher compression, higher engine speeds, higher bearing pressures, more piston-and-cylinder-wall friction per minute, greater heat—in short, infinitely harder service. Outboard owners began the use of high-test fuels, benzol mixtures, even ether. Always these things lead to the same result—vastly harder engine service.

To meet these strenuous new conditions, higher and higher percentages of oil-to-gasoline were employed by builders and users in order that the engines might stand up under boat speeds now reaching up to nearly forty miles per hour. The engines needed more oil—up to a certain point. Beyond that point there came a natural mechanical reaction, wholly aside from carbonization and spark plug fouling (evils which always follow over-oiling in any engine). It is here that the question of gasoline dilution enters into the problem.

Early in the development of Outboard Special it was noted that if oils heretofore considered suitable were employed in a high speed, (*Continued on page* 174)

. . . After a year and a half of experimenting, trials and tests, we announce the . . .

LUDINGTON HYDRO

. . . an outboard hydroplane, speedy enough to give a good account of itself in any race, seaworthy enough to run in a two reef breeze and staunch enough to last for several seasons.

IT is built of Indiana veneer, over aircraft spruce frames by master craftsmen trained in boat and airplane building and construction. The design is by an extremely successful small speed boat designer.

The Ludington Hydro is at its best in rough water racing. It is also an excellent speedy runabout for use in all waters.

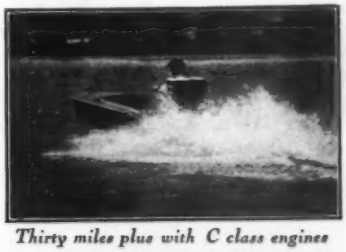
The Ludington Hydro is far past the experimental stages. It is fully developed. Preceding it were at least ten especially designed hulls. From the best of these, the Ludington Hydro was finally developed, as now offered. What we started out to construct was a one step hull, fast enough to be a factor in any race, and at the same time sturdy and staunch so that it would stand several seasons of racing. How well we have done this is shown by the orders which have come to us on the performance of the hull. One of the best known owners of speed boats on the Pacific Coast said in purchasing a Ludington Hydro that it was worth twice the price of $225 which is the regular price of this hull.

The planking of the Ludington Hydro is three ply veneer, yet there is absolutely no warping or peeling of the edges. There is a light deck forward, along the sides and forward of the engine mounting. This insures dryness. We say light deck, yet it will easily support a man's weight. The finish is mahogany on sides, deck and coaming; bottom is dark red lacquer enamel with grey in the cockpit interior.

The Ludington Hydro has an adjustable stern, adaptable to any form of outboard motor. It is impossible to tell you here all of the details which you want to know about the Ludington Hydro. We have prepared a booklet which tells all about it. Your copy will be mailed promptly upon request to Ludington Aircraft, Inc., 816 Atlantic Building, Philadelphia, Pa.

THE LUDINGTON HYDRO

14 feet long, beam 49 inches. Hull price $225. Has adjustable stern for various types of engines.



Thirty miles plus with C class engines

Turning wide open

LUDINGTON

LUDINGTON AIRCRAFT, Inc.

Eastern Distributor
UNIVERSAL SERVICE MOTORS CO.
Broad and Wood Streets
Philadelphia, Pa.

Pacific Coast Representative
BUELL BROS.
705 State Street
Santa Barbara, California

LUDINGTON AIRCRAFT, Inc.
816 ATLANTIC BLDG., PHILADELPHIA, PA.
Gentlemen:
Please send me your booklet on the Ludington Hydro.

Corker, the little Evinrude powered Sea Sled driven by C. P. Stevens of Albany, which finished first in the Boston to New York outboard race

Frank Wigglesworth and Walter H. Moreton, leading spirits of the New England Outboard Motor Boat Association which promoted this long-distance race

Boston *to* New York *Outboard Race*

Ten Boats Finish the Two Hundred and Fifty-Mile Non-Stop Run —Longest and Most Severe Test for Outboard Boats in History

AT 4:30 o'clock in the morning of June 16, as a faint crescent of the new moon rose out of the ocean to the eastward of Boston light, thirty-four outboard powered craft of varied sizes and descriptions, darted across a starting line established in Boston harbor bound for New York on what was to be the longest outboard race in history. Besides being the longest, the race was perhaps the most important and in many respects made history which will never be forgotten and provided data which will be of great service to all that build outboard boats and engines.

The course for the race lay out of Boston harbor, across Massachusetts Bay, passed Minot's ledge, through the now government owned Cape Cod Canal, down Buzzard's Bay into Block Island Sound and the open ocean, passed Point Judith, thence through Fisher's Island Sound into Long Island Sound, the entire length of which was traversed, to the East River, with the finish line established at Flushing Bay. The total distance was 250 miles.

The Boston-New York marathon was under the auspices of the New England Outboard Motor Boat Association, a member of the American Power Boat Association. Frank Wigglesworth, of Boston, as chairman of the Race Committee, with the entire board of governors of the New England Association had worked hard and long on the arrangements and it is hard to see how they could have been (*Continued on page* 194)

H. Ross Maddocks drove his Baby Whale to fourth place in this race. A mishap to the steering gear made it necessary to control the boat for the entire distance by hand

34.287 Miles an Hour: New World's Record, Class C Time Trials Made by Fairchild Aero at Worcester, Mass., Regatta on May 29th

Faster in the Longest Race! *Faster Over the Short Course!*

New World's Record!

and four out of first five boats were Fairchild Aeros!

AT the Worcester, Mass. Regatta on May 29 Fairchild added one more bit of convincing proof that airplane features as used in the Aero give a consistently faster boat. The Fairchild Aero driven by James C. Smith established a new official World's Record for Class C Time Trials of 34.287 miles an hour. This was done in competition with leading drivers from throughout the entire eastern United States. *The muffler was on the motor.*

And what was equally impressive, four out of the first five boats to place in the Class C time trials were Fairchild Aeros. Not only was the Fairchild Aero the fastest boat in Class C, but it was by far the most consistent performer.

In the Albany-New York Race the only Fairchild boat entered took first place in record time, time better by over sixteen minutes than any previous record. There was a reason for this, just as there was a reason for the new world's record set by the Fairchild Aero at Worcester. The new ideas found only in the Fairchild Aero are directly reponsible for the speed and consistent performance of this revolutionary hull. In the Aero features which contribute to the speed and stability of modern aircraft are combined with the best principles of small speedboat design. Both above and below the waterline the Fairchild Aero is an entirely different type of outboard racing boat. Six longitudinal steps, combined with two cross steps, give a marked reduction in bottom friction.

Above the waterline, the streamline fuselage gives reduced air resistance and adds the final touch of speed to a marvelously fast hull. Stern flotation tanks, built as a part of the hull, and the scientifically applied dihedral angle contribute their part to the stable, smooth-riding action of this winning outboard racing boat.

The Fairchild Aero is 12 feet long, with fifty inch beam. Wght., 120 lbs with floorboards. Price $330

Pledge to Outboard Drivers

The Fairchild Corporation is determined to build, and to continue to build, the fastest outboard hull that the best marine and aerodynamic engineering skill can produce.

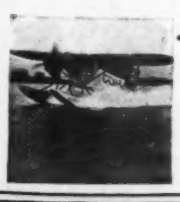
Sherman M. Fairchild
PRESIDENT

For those who have not seen the Fairchild Aero in action, a copy of "The Fairchild Aero and How It Came About" will be of interest. A copy will be sent without charge

HAYNES-GRIFFIN, Inc.
NATIONAL SALES AGENTS
41 West 43rd Street · New York City

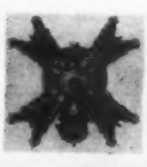
FAIRCHILD AERO

FAIRCHILD AIRPLANE MANUFACTURING CORPORATION



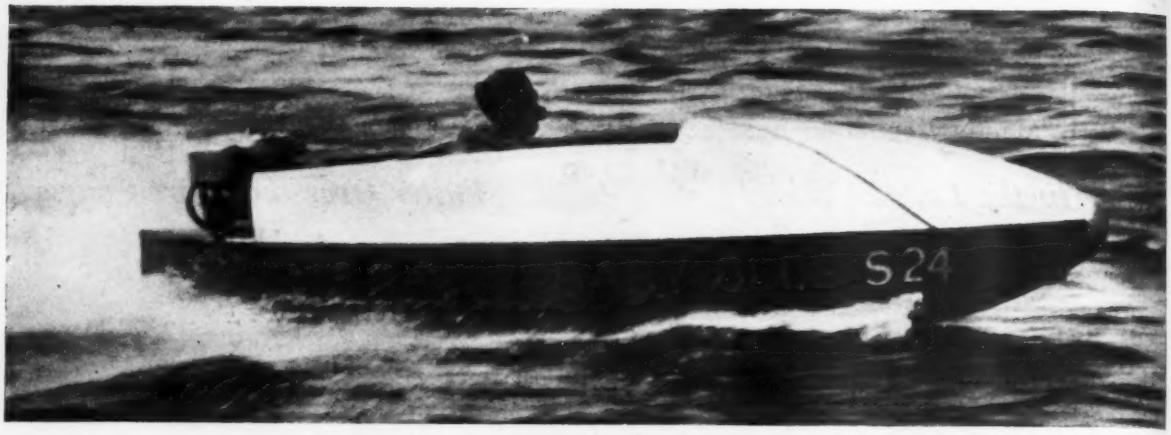
Fairchild Cabin Planes

Fairchild Aerial Cameras



Caminez Airplane Engines

Photograph P. & A.



Brewster Baby Olds—the winner of the thirty-six-mile race around Staten Island, New York

Outboards Race Around Staten Island

Many Boats Attempt a Strenuous Trip of Thirty-six Miles in Face of Half a Gale

THE Princess Bay Yacht Club were sponsors for a fine outboard race on June 10th which encircled Staten Island in New York harbor, covering a distance of thirty-six and one-quarter statute miles. The New York Outboard Motor Boat Association assisted in conducting the race through its officials, Commodore Eldridge and Secretary Willis, while the U. S. Coast Guard acted in its usual efficient way in patrolling the course and proved the value of this patrol by fishing an unfortunate competitor out of the waters. While a large number of boats had declared their intention of taking part in this race, there were only some seventeen or eighteen which actually got away. The morning of the day of the race proved to be very stormy with a very brisk wind whipping the bay into white caps and heavy seas. This undoubtedly interfered with those competitors who planned to drive their boats to the scene of the start. As the day continued the breeze moderate and while it was still quite brisk at the start of the race it fell off rapidly and an hour later the conditions were ideal.

This race enjoyed the distinction of having prominent officials of the Borough of Richmond present and Borough President John A. (*Continued on page* 196)

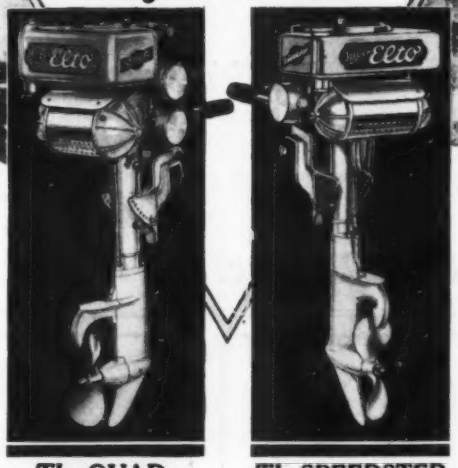
AROUND STATEN ISLAND RACE
Class B Start 2:15
June 10, 1928

Number	Name	Builder	Driver	Owner	Motor		Time
0-15	Baby Whale	D. N. Kelly	J. C. Rolfe	same	Lockwood	B	3.39.28
V8-534	Baby Playmate	Wheller S/Y	T. Roberts	same	Lockwood	B	3.45.16
S-10	Miss Yvette	Wm. O. Davies	same	same	Lockwood	B	Did not finish
S-14	Billy	Sea Sled	Wm. Feldhusen	A. P. Williams	Johnson	B	Did not finish
S-16	Julie Cute Craft	Albrecht-Nichols	Joe Boquet	Armond Boquet	Caille	B	Did not finish
08-16	Miss Princess	Cute Craft	Kirk Ames	same			Did not finish

Class C Start 2:15

Number	Name	Builder	Driver	Owner	Motor		Time
S-24	Baby Olds	Brewster Boat Wks.	D. W. Brewster	Brewster Boat Wks.	Evinrude	C	3.30.47
08-111	Cute Craft Herself	Cute Craft	A. T. Buffinton	A. T. Buffinton	Evinrude	C	3.33.03
0-11	Fairchild	same	J. C. Smith	Haynes-Griffin	Evinrude	C	3.41.57
08-542	Miss Richmond	Sea Sled	H. Hinson	P. R. Smith	Evinrude	C	3.47.09
005	Flying Fish III	Airship, Inc.	V. Withstandley	same	Evinrude	C	3.47.22
S-12	Fritz	Albrecht-Nichols	H. A. Cunningham	same	Evinrude	C	4.00.11
S-50	Grace L	Sea Sled	T. Kieran	John A. Lynch	Evinrude	C	4.01.07
S-25	Bob Cat	Sea Sled	Vida Gentry R. S. Woodward	R. S. Woodward	Evinrude	C	4.17.03
S-52	Baby Whale	D. N. Kelly	R. R. James	Haynes-Griffin	Evinrude	C	4.30.00
3-36	Skip Sea	Albrecht-Nichols	J. F. Dykes	Albrecht-Nichols	Johnson	C	Did not finish
08-527	Red Devil	Penn Yan	D. C. Fonde	same	Evinrude	C	Did not finish

These Two Motors answer every demand for utmost speed on racers—*for* Swiftest runabout service—*for* all-round performance on any fast hull



THE Super Elto Quad—4-cylinders!

Here is a velvety luxury and slashing thrill of performance utterly new in outboard motoring.

Here is—not merely *speed* — but *4-cylinder speed!* Twenty-five smooth, vibrationless miles an hour in big, plump-cushioned runabouts! Thirty-five miles — *and up* — on the faster type of racing hulls!

Here is a motor that is actually vibrationless — that shows no trace of vibration at any speed. *Dependable*—no motor offers a greater degree of steadfast reliability.

Here are a multitude of features found on no other outboard motor. Dual ignition and dual carburetion. Instant starting with a 2-inch snap of the flywheel. Easy, dependable reverse. Such responsiveness and obedient handling ease that even the novice can operate it confidently.

The Quad is compact, *truly portable*. Transferring it from runabout or family boat to racing hull is the work of seconds. Despite 4-cylinders and tremendous power, it weighs but 92 pounds.

***The* QUAD**
4 Cylinders
Price, $275.00

***The* SPEEDSTER**
B-Class
Price, $165.00

THE Super Elto Speedster — greatest of middle weight speed motors!

Here is a new type of *speed-utility* motor—capable, versatile, amazingly fast, enormously sturdy.

A fighting, winning champion on the race course. A rollicking companion on a staunch, swift play boat —

And equally at home on the stern of a speedy cruiseabout — as jaunty and fit at the end of a thousand mile grind as at the beginning.

There is no service too hard for the Speedster. Open throttle, top speed is second nature to it. Stamina to respond to constant, merciless driving is built into every fibre of it.

The Speedster is an ideal shipmate for the eager boy whose greatest thrill is in leading the fleet. It is a boon to the sportsman and fisherman who demand speed without sacrifice of serviceability. It operates perfectly at slowest trolling speed.

Starts with finger-tip ease — a quarter turn flip of the flywheel. Compact, portable, weighs but 62 pounds.

Send for Complete Catalog on Super Elto Motors!

ELTO OUTBOARD MOTOR COMPANY, Ole Evinrude, *President*, Mason Street, Department F, Milwaukee

The Super Elto **Quad** *The* Super Elto **Speedster**

$1,000.00 PURSE
For Highest Quad Speed

The Elto Outboard Motor Company offers a $1,000.00 purse for the best Quad record in miles-per-hour made in competition at any official race up to October 1st, 1928. For the second best record, a purse of $500.00. For Speedster owners, a purse of $500.00 is offered for the best speed achieved under the above conditions. For the second best Speedster record, a purse of $250.00.

Any record to be considered, must be approved by the Judge of Outboard Records. Full information on request.

Advertising Index will be found on 3rd last page

A NEW HIGH POWERED HIGH SPEED FOUR-CYCLE Outboard Motor

—Three times the Horsepower —with little more weight—

Front or Inboard View

FIVE CYLINDER RADIAL TYPE

Embodying the latest and most advanced ideas in motor construction, and featuring—

BALL BEARING CRANK SHAFT
BALL BEARING CONNECTING RODS
FORCE FEED LUBRICATION and PULLER PROPELLER

as well as many other startling innovations

Write for Details

CROSS GEAR & ENGINE CO.
3260 BELLEVUE AVE. DETROIT

TRADE MARK
CROSS
ESTABLISHED 1898

MANUFACTURERS OF THE FAMOUS CROSS PRODUCTS

Typhoon

36 MPH

HERE is a boat of championship calibre with a speed of better than 36 miles per hour. The Typhoon is a ruggedly constructed and handsomely finished craft designed for use with high powered motors.

Every ride in this wonderful boat will thrill you with its tremendous speed, ease of control and extreme seaworthiness. The Typhoon is built throughout of selected materials by master craftsmen on a large production schedule which makes possible its remarkably low price.

$165 F.O.B. FACTORY

You have a choice of two models—the beautiful paint finished Typhoon priced at $165 or the de luxe natural finished model for $15 additional. Write today for descriptive literature.

IMMEDIATE DELIVERY

Ask about our Trade Wind model a practical double cockpit boat for all around use, combining speed, seaworthiness and comfort. Speeds up to 28 m.p.h. Price $215.

DEALERS! Get our proposition today

HEMMING LARSEN BOAT WORKS
Marinette, Wisconsin

CARPENTER OUTBOARD MOTOR BOAT FITTINGS

Polished Aluminum Streamline Combination Light

Mahogany Outboard Flagpole and Flagpole Socket

Outboard Flagpole and Stern Light

Our new Bulletin of Outboard Equipment shows the latest devices and accessories needed to outfit this popular boat. SENT FREE.

Established 1840

GEO·B·CARPENTER & Co.

Outboard Bow Plate

SAILMAKERS and RIGGERS

MARINE SUPPLIES
200 W. Austin Ave.
CHICAGO

SPEED

And Fine Craftsmanship

ACME SKIPPER—ACME BABY STEPPER—
One a 12-ft. Hydroplane, the other a 14-ft. Step-Plane.

Both trigger lightening little craft that fairly dart over the water, distance rivals, and cop the prizes. Both outstanding in design, agility and above all, SPEED.

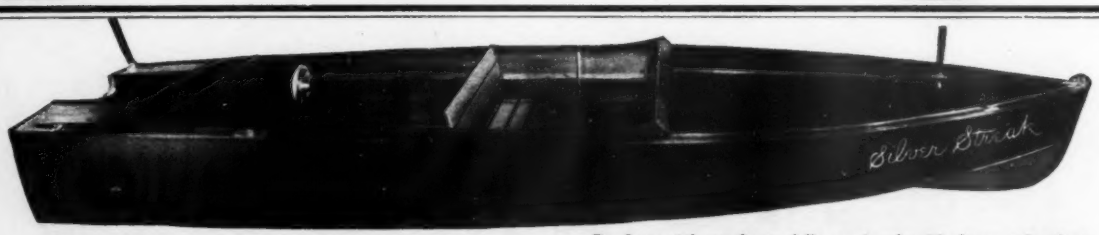
Both well built and thoroughly safe. Both equipped with exclusive Acme low-friction airplane bottom. Both superbly finished and both real speedsters in their respective classes. Both sold on performance and craftsmanship rather than price.

RUSH ORDERS FILLED IN A HURRY

How soon can we get you out on the water? Quick, if you send for details yet today and wire selection tomorrow or next day.

DEALERS: Wire for special dealer proposition and get set.

THE ACME BOAT CO., 712 Gay St., Miamisburg, Ohio



Silver Streak

ALL MAHOGANY OUTBOARD RUNABOUT

De Luxe 16' runabout, fully equipped with brass trimmings. Beam 51"; Depth 29". All mahogany with brass screw fastenings. Cadmium plated bolts on chine corners. Ash battens. Framing bolted. *Built to last.* Speed up to 35 miles per hour.

Also builders of Racing Step-Hydroplanes.

Write for circulars.

Isle La Plume Boat Works
La Crosse, Wisconsin

Advertising Index will be found on 3rd last page

Pep, Speed, and Pleasure In Outboarding—

—depend largely upon your fittings. And the most important of all outboard fittings is your steering gear. Improved WILCOX designs offer you the steadiest steering you ever thrilled to.

Know Your R. P. M.

You win or lose on the extra hundred. The Corbin Tachometer for outboard motors tells you when to trim your boat—adjust your carburetor or spark—to get the best speed.

Accurate because ruggedly built especially for Outboards. Reasonably priced. Complete, ready for installation, only $30.00; with Maximum Speed Hand (an exclusive feature) only $35.00.

At Your Dealer's

Give make and model of your engine when ordering.

Outboard Folder Free

WRITE today for this new folder of Wilcox-Crittenden origin, showing a complete line of Outboard Dependable Fittings. Mention name of your dealer when writing.

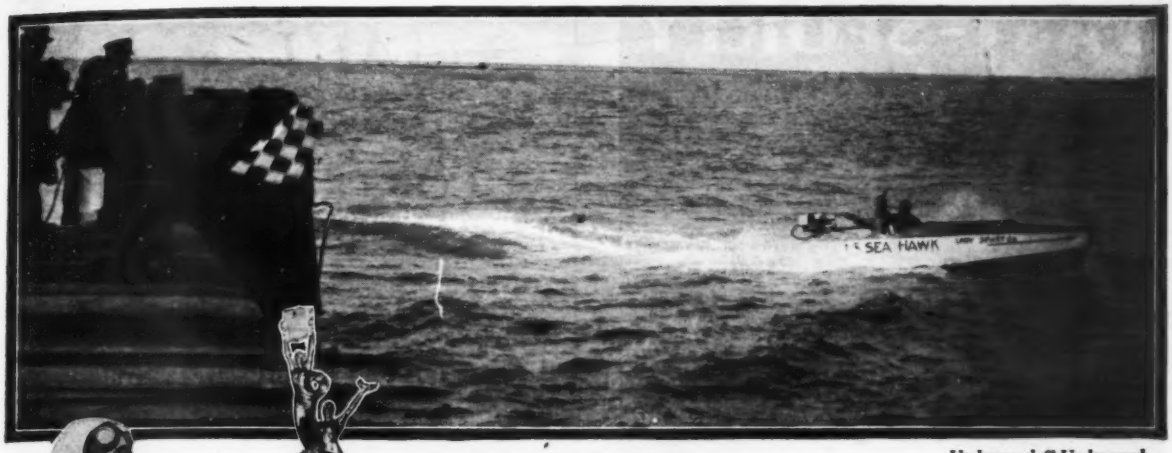
SEND FOR THIS NEW FOLDER

WILCOX, CRITTENDEN & CO., INC.

Established 1847

4 So. Main Street Middletown, Conn.

Advertising Index will be found on 3rd last page



Underwood & Underwood

Mary Alcott Richardson

Winner--

by 28 minutes!

in the greatest outboard race ever staged

Mary Alcott Richardson, fifteen year old Chicago high school girl, drove *Lady Sparton*, a standard Mullins Sea Hawk powered with an Evinrude motor, over the hundred miles of rough going in the Outboard Marathon, Milwaukee to Chicago, in four hours and two minutes.

Twenty-eight minutes after the checkered flag signalled Miss Richardson's victory, the second boat came in. Altogether, six boats finished out of approximately fifty that started.

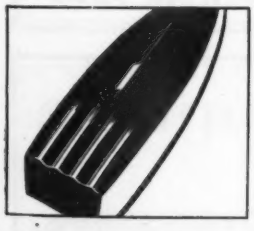
A gruelling race—over such a course—and so early in the season. But the results should be a great help and a great comfort to you in deciding what boat to buy for yourself and your children. The Marathon has definitely established the importance of sturdy, life boat construction and air chambers, and the fact that a boat may be *both* seaworthy and fast.

The heroine of this remarkable race, by the way, had never driven a boat until five weeks before this brilliant victory.

One hundred miles of lashing, white-capped angry sea. A snapping, whining wind fighting boats and pilots every foot of the way.

Half a hundred boats crashed gamely into the chop at the starter's gun—and Miss Richardson, soaked, chilled, cramped but happy, led five of her fellows to the finish line in Chicago.

Corrugant Bottom



We don't like to talk shop at a time like this, but you will probably be interested in the *corrugant bottom*, a feature of Mullins Boats that proved helpful to Miss Richardson. These long corrugations enable Mullins Boats to "ride the bubbles", which means less draft, more speed per horsepower, and no side-slip.

MULLINS

Send for the 1928 *"Book of Boats"*

MANUFACTURING CORPORATION

276 DEPOT STREET - - SALEM, OHIO

Advertising Index will be found on 3rd last page

BABY WHALE.....

the consistent winner!

Ross Maddocks in his Baby Whale

Baby Whale—the boat that wins! The boat that smashes record after record! The one boat that crosses the finish line far ahead of all competitors—*every time!*

This marvelous speed is due to Baby Whale *design.* To that—and 60 years of boat building experience, perfect workmanship and the use of only the best materials.

There's one sure way you can rank with the winners—that's with a Baby Whale. Make it your choice!

Look these over!

New world records established by Com. H. Ross Maddocks at the Lake Quinsigamond Regatta, Worcester, Mass., May 30th.

	Miles an Hour
CLASS E (Time Trials)	35.0222
In Competition	
CLASS C (Novice)	32.48
CLASS C (Free for All)	32.14
CLASS C (Free for All, 10 Miles)	32.688

(All Records Made Using Mufflers)

The HARPOON (shown above) has created a real sensation in the motor boat world. A family runabout that can be operated at a moderate cost . . . has all the usual BABY WHALE features . . . speed, safety and comfort. Beautifully equipped throughout.

New York *Distributors:*
H. MIKKELSON, 44 Warren Street, New York, N. Y.
New England *Distributors:*
WALTER H. MORETON CORP., 1043 Common wealth Avenue, Boston, Mass.

D. N. KELLEY & SON The Famous Whaling City BOATS **Fairhaven, Massachusetts**

Outboard Motor Boats Win Worlds Records

When Planked With

PHILIPPINE MAHOGANY

BABY WHALES WIN AGAIN!

Baby Whale, planked with our Philippine Mahogany, wins all three Class C races at Worcester, Mass., establishing two World Records for C Amateur and C Free-for-All Marathon, and also making new Class C World Record.

No greater test can be made on a hull than in a speed boat race, and PHILIPPINE MAHOGANY IS THE CHOICE of many speed boat builders, because it combines:

STRENGTH
DURABILITY
LIGHTNESS OF WEIGHT
FREEDOM FROM DEFECTS
MODERATE COST

Are YOU using Philippine Mahogany, too?

We specialize in thin planking, 1/4", 5/16" and 3/8", and will be glad to quote on receipt of your schedule.

Descriptive circular and sample on request

INDIANA QUARTERED OAK CO.

222 East Avenue Long Island City, N. Y.

The Greatest Quantity of Quality at the Price

ATLAS

CLINCHING NAILS

All Styles
(Cut and Wire)

Made from iron and furnished plain and hot galvanized, also made from copper, brass and other materials.

COPPER BURRS

All Sizes

OVAL and FLAT HEAD COPPER RIVETS and BURRS

OVAL and FLAT HEAD CUT CANOE TACKS

Made from Copper and Brass

ATLAS products are scientifically designed and manufactured from the best quality of materials under careful supervision. We use only the old-fashioned hot process of galvanizing Atlas Tacks, Nails, Rivets, etc.

Baby Whale outboard boats, built by D. N. Kelley & Sons, Fairhaven, Mass., like other leading makes of standardized craft, are fastened with Atlas products.

Boat builders! Ask your source of supply for prices on Atlas hot galvanized, brass and copper boat fastenings.

ATLAS TACK CORPORATION

The Largest and Oldest Manufacturers of Tacks and Small Nails in the World

FAIRHAVEN, MASSACHUSETTS **ST. LOUIS, MISSOURI**

Advertising Index will be found on 3rd last page

The Appeal of Outboard Motor Boating

(*Continued from page* 155)

in some telepathic manner to my host for he asked me if I would like to drive the boat. I explained to him that I had never handled a motor boat of any kind and might demonstrate my lack of skill by spilling my host and myself in the lake. Being an enthusiast and a good sport he reassured me, gave me a few simple hints and I found myself handling the boat and getting the surprise of my life. The enjoyment and exhilaration of it can only be realized by actual experience. I realized that in a few minutes I had become a rabid outboard motor boat fan. I had found a boat that was a thing of beauty in line; trustworthy in handling, thrilling in speed and at a price so low that I felt I could not afford to pass up th epleasure of this sport. Now I am on the water at every opportunity and find myself wishing that the skeptics and the uninitiated could all be introduced to the wonders of outboard motor boating as I was, except that I realize that when this actually happens the waters will be as crowded with outboard runabouts as the highways are pammed with automobiles and then I shall have to take the air."

Lubrication for the Outboard Engine

(*Continued from page* 158)

high power outboard, an exorbitant proportion of oil-to-gasoline was required. At first nothing was thought of this by engine designers, because there are about the same number of B.T.U.s (British Thermal Units, or heat units) in oil as in gasoline—approximately 20,000 per pound of gasoline and 19,000 per pound of oil. So, it was reasoned, diluting the gasoline with oil would not result in reducing the power. This is true—up to a certain point. But beyond that point, power falls off alarmingly. For example, some of the 1928 outboards call for as high a percentage of oil as one quart to one gallon of gasoline. But when more oil is employed, power drops off until the engine at last cannot run.

Yet the gasoline-and-oil mixture contains about the same inherent heat value as gasoline alone. The difference of course, is in the explosive ability of the mixture. For example again, if oil and gasoline are used in equal parts, the result—when the engine can be made to run at all by pre-heating—is low power, hesitating, faltering performance and inability to function above 25 per cent of normal. Increasing the proportion of oil still further makes it impossible for the engine to run at all. Still, the number of heat units is the same. Therefore it is clear that there are high and low limits to the percentage of oil that should be used to obtain maximum efficiency.

But that is only one phase of the matter. As all who use engines well know, there is a vast difference between oils. Yet a gallon of poor oil has the same volume as a gallon of well-refined, rich oil. It is exactly the same as the difference between milk and cream. A gallon of milk occupies no more space than a gallon of cream. Yet a little cream will give more results than a much larger volume of milk.

To quote one of the engineers: "Our problem was to furnish maximum lubricating efficiency with the lowest actual percentage of oil, so that the explosive power of the mixture might be kept to a high point. So we kept improving the oil, keeping step with engine development, and always getting the oil richer—more like cream, but also keeping the carbon content down. And as we did that, we could lower the amount needed per gallon of gasoline. In that way we kept the power up while still lubricating perfectly. We didn't increase the amount of oil used, but instead increased its lubricating value.

"But that wasn't all of the problem either. We had to so make the oil that when it was added to the gasoline, its ability to lubricate wasn't destroyed when the gasoline in turn cut the oil. In other words, the mixture fed into the engine must be such that the gasoline-and-oil vapor would give maximum power, yet also there must be sufficient of the oil mist not burning to furnish the lubrication needed. Now that was relatively a simple matter a few years ago, but please remember that the motors of today are wonderful little power plants, and not of low power as was formerly the case. These modern engines have higher speed, higher compression, higher heat. The oil that did the work all right in 1926 simply can't do it in 1928. If anybody thinks it's simple and easy to make an outboard oil that will give maximum efficiency from every angle in the new engines, let him try it and find out the things he has to learn and what the oil actually has to do."

D. N. KELLEY & SON—**BABY WHALE**—FAIRHAVEN, MASS.

HOLTITE Products . . . . make good workmanship—better!

Reg. U. S. Patent Office

Above is shown a Baby Whale speeding to victory. Holtite Products are used exclusively in the manufacture of these famous Racing Boats.

In the manufacture of boats, the smallest details often determine the difference between success or failure.

One of the surest ways of guaranteeing perfect workmanship is the use of Holtite Products. Leading boat manufacturers have used them for years. They consider them essential in the construction of their craft.

There is a reason for it, of course. Holtite is a recognized, trade marked name. Back of it is an ironclad guarantee of service and quality. Holtite Wood Screws have a sharper, cleaner cut thread that will not loosen or let go; sharper gimlet points; slots of correct depth that will not break down. In short, they offer better quality at no increase in price.

You'll get better results if you use Holtite Products. Put them to work for you.

"Keep it together with Holtite Screws"

CONTINENTAL WOOD SCREW CO.

Warehouse
1421 FORT STREET
CHATTANOOGA, TENN.

Warehouse
7502 WOODWARD AVE.
DETROIT, MICH.

NEW BEDFORD, MASS.

Advertising Index will be found on 3rd last page

FLORIDA FLYER

Holder of All Four World's Records At One Time

Excepting Motor Manufacturers

RECORDS

CLASS B STRAIGHTAWAY	27.7 M. P. H.
CLASS B COMPETITION	28.3 M. P. H.
CLASS C STRAIGHTAWAY	33.87 M. P. H.
CLASS C COMPETITION	32.45 M. P. H.

With 1927 Motors

A, B and C Class	*C and D Class*	*E Class and up*
10′ x 44″	11′8″ x 46″	14′ x 54″

Dealers get in touch with us—Attractive proposition

FLORIDA FLYER BOAT CO.

BAYBORO

ST. PETERSBURG, FLORIDA

Girl Wins Strenuous Contest

(*Continued from page* 156)

As the boats got underway from Waukegan a fresh southeast breeze had sprung up, giving the contestants a headwind with a chop to buck. This kind of going did not appeal to most of the racers as it was on the leg from Waukegan to Wilmette that most of them met difficulty or dropped out. The racing type of craft did not stand up to the occasion. The longer and heavier type of displacement hull with no step in the underbody proved vastly superior when the wind became ahead. Of the eight boats that finished, practically all of them were of the displacement type.

The boats of the Mullins Company, Century Booat Company, Lyman Boat Company, Dunphy Boat Company, Gordon Hooton and Thompson Brothers and one or two others, stood up remarkably well and proved their seagoing qualities. The boats were divided into Classes B, C and D. Lady Spartan, a Mullins craft, Evinrude powered, took first in Class C, with Century Traveler III, built by the Century Boat Company and Evinrude powered, in second place. In Class B. Vagabond, a Thompson boat, owned and driven by Franklin Cook and powered with an Elto Class B motor, took first place. Bull Frog, also Elto powered, took second place in Class B.

In Class D, Kaelher, a Dunphy boat, powered with an Elto Quad motor, took first and Century Traveler II, also Elto powered, took second.

The winning boat, Lady Spartan, in Class C, made the best time over the course, completing the distance in four hours, two minutes one second which is about at the rate of 23 miles an hour. Lady Spartan was driven by Mary Alcott Richardson, a fifteen year old school girl of Chicago, accompanied by her father. Miss Richardson won the Commodore MacDonald Gold trophy.

Diesel Cruisers to Race

A new element has appeared to increase the burdens of race committees, this being the small Diesel engined cruiser. A number of these boats were built during the spring and early summer and already plans are being discussed for a long distance race for boats of this type. The middle of August will probably see a half dozen or more of these boats undertake a trip from the vicinity of New York to the scene of the regatta at Newport, Rhode Island, which follows on August 17th and 18th. While the plans for this race are still somewhat sketchy, enough has been discussed so that we can say that the boats will probably leave New York during the early evening of the day selected and make a night run down the Sound to Newport. Promising new boats which are expected to take part are Mary, owned by Dr. Otto I. O'Connor; Diana, owned by D. Ughetta; Olympic, owned by Commodore I. J. Glover, of the Harlem Yacht Club; Omnis, owned by J. Linnenkraus, Huntington, Long Island; Sox II, owned by G. W. Loft, of New York, as well as other as yet unnamed boats owned by G. W. Stimmel, C. Stein, C. D. Cummins and C D. Isaacson.

Colonial Yacht Club Events

One of the most outstanding one-day regattas to be held in the vicinity of New York this summer will be staged under the auspices of the Colonial Yacht Club, Sunday, July 8th. The events will include the annual Bear Mountain handicap race for cruisers; a cruiser race for boats 28 feet and under for the Richardson trophy; and the Past Performance Handicap race (Runabouts) for the Davidson trophy. These races have been postponed from June 24th on account of tidal conditions.

On June 24th, however, the annual outboard carnival, including the marathon contest for the Heilner trophy will be held over a three-mile rectangular course in front of the Colonial Yacht Club shore station at 153rd Street and Hudson River. There will be various speed contests for Classes B and C, in addition to the Heilner trophy race. The usual testimonial dinner and entertainment for entrants in the Bear Mountain Handicap race will be held at the Town House of the C. Y. C., Saturday evening, July 7th.

Incidentally, the Colonial Yacht Club is planning to enlarge greatly upon its previous motor boat activities and is offering non-resident membership, including all privileges of the city club house at 257 Madison Avenue, and its shore landing stations and anchorages, to non-resident members. The board of directors has recently voted to extend this privilege of non-resident membership to all circuit riders and other eligible yachtsmen residing 50 miles or more from New York City.

Advertising Index will be found on 3rd last page

MORRIS ROSENFELD PHOTOS

(Above) James Smith and his Mobiloil lubricated Fairchild Aero in action. (At right) Close-up of the Class "C" record holder with a 1 gallon can of Mobiloil.

Mobiloil wins again

—*in Lake Quinsigamond*

—*in the Milwaukee-Chicago Marathon*

ON May 29 in the time trials at the Worcester, Mass., Regatta, James Smith set a new World's record for Class "C" boats. Driving a Fairchild-Aero, he averaged 34.287 miles per hour over the six-mile course on Lake Quinsigamond.

For the correct lubrication of his Evinrude Speeditwin engine Mr. Smith relied on Gargoyle Mobiloil. His appreciation of Mobiloil's part in this record-breaking run is best expressed in his own words, "Engine ran fine all the way with Mobiloil."

This is typical of the popularity of Mobiloil among leading motorboat drivers. You will find Mobiloil with the winners in other races all over the country.

Mary Alcott Richardson won the Milwaukee to Chicago Marathon June 2 in her "Lady Sparton." Here again the Evinrude Speeditwin engine functioned perfectly with Mobiloil throughout the 90-mile run

Of the 49 starters in this Marathon, only five finished. All five of these used Gargoyle Mobiloil.

Quality and confidence based on years of experience account for Mobiloil's universal popularity. It is on sale wherever you cruise.

HOW TO BUY—*For outboard motors*—we suggest the 1-quart or 1-gallon cans of Mobiloil. *For small inboard motorcraft*—the 1-gallon or 5-gallon cans of Mobiloil. *For cruisers*—the 10-gallon drum, the 30-gallon drum, or 55-gallon drum of Mobiloil, all with convenient leak-proof faucets

GARGOYLE

Mobiloil

Look for the red Gargoyle trade-mark on the Mobiloil container

MAKE THIS CHART YOUR GUIDE

OUTBOARD MOTORBOAT ENGINES

The recommendations below are for average service. For racing service an increased quantity of oil in the gasoline is usually required, and in some cases a different grade. See manufacturer's instruction book for racing recommendations or communicate with the Engineering Division, Vacuum Oil Company, 61 Broadway, New York.

NAMES AND MODELS OF OUTBOARD MOTORS	1928			1927			1926			1925		
	Summer	Winter	Pints per Gal.	Summer	Winter	Pints per Gal.	Summer	Winter	Pints per Gal.	Summer	Winter	Pints per Gal.
Caille, Master Five Speed Twin	A	A	1	B	B	1	...	...	...	...	...	...
Caille Models 30 and Jr., 5 Speed Twin	A	A	1	...	...	...	...	...	...	...	...	...
Caille (*All Other Models*)	A	A	½	A	A	½	A	A	½	A	A	½
Cross, 5 Cyl. Radial	A	A	...	...	...	...	...	...	...	...	...	...
Elto Quad and Speedster	A	A	1	...	...	...	...	...	...	...	...	...
Elto (*All Other Models*)	A	A	½	A	A	½	A	A	½	A	A	½
Evinrude Speeditwin	A	A	1½	A	A	½	...	...	...	...	...	...
Evinrude Fastwin	A	A	1½	A	A	1½	...	...	...	...	...	...
Evinrude Fleetwin	A	A	½	...	...	...	...	...	...	...	...	...
Evinrude (*All Other Models*)	A	A	½	A	A	½	A	A	½	A	A	½
Hartford	A	A	½	...	...	...	...	...	...	...	...	...
Johnson 1925, 2 Cyl.	...	...	...	...	...	...	...	...	...	A	A	½
Johnson Big Twin 40, Giant Twin 40, J-25, A27, 4 H.P. 1927, 7 H.P. 1927, 2½ H.P. 1926, 1½ H.P. 1926, 5 H.P. 1926	A	A	1	A	A	1	A	A	1	...	...	...
Johnson K-40, P-30 and P-35	A	A	½	...	...	...	...	...	...	...	...	...
Johnson (*All Other Models*)	A	A	½	...	...	...	...	...	...	A	A	½
Koban	...	...	...	A	A	½	A	A	½	A	A	½
Lockwood Ash Single	...	...	...	A	A	½	A	A	½	A	A	½
Lockwood Ash Twin	...	...	...	A	A	½	A	A	½	A	A	½
Lockwood (*All Models*)	A	A	1	...	...	...	...	...	...	...	...	...

The World's Quality Oil

Mobiloil

VACUUM OIL COMPANY

The Playboat with Racing Speed!

ZIPABOUT

"Zip" is right! Here's a trim little outboard craft that is perfect for your vacation days on lake or river. She's a mahogany beauty, and boy, how she can step!

You can use A, B or C class outboard motors, and if you want to race, enter ZIPABOUT in any regatta confident of winning.

ZIPABOUT Carries Two or Three Persons Safely at a Speed That Thrills!

Designed by B. T. Dobson, Naval Architect
Length over all, 10 ft. 6 in. Beam, 48". Brass and Copper Fastenings.

A Finely Finished Mahogany Boat $170 F.O.B. Fall River

THE B-D BOAT COMPANY
31 North Seventh Street, Fall River, Mass.

KABIN-KRAFT

Chair

for OUTBOARDS and CANOES

The Top-Notch in Boating Comfort

KABIN-KRAFT chairs have been used for years at our own Maine Woods Camps "Troutdale Cabins" and perfected by our Troutdale Cabins craftsmen. Constructed after the snowshoe principle, these chairs are laced with strong, carefully selected rawhide on white ash frames and spruce supports. They are not only cool and comfortable without cushions, but are extremely durable and lightweight—only four and one-half pounds.

Compact and portable, you can easily stow these chairs away in small space. Weather and water cannot damage them. If wet by rain or spray the chair dries within two minutes.

Kabin - Kraft Chair when folded is easily carried.

Adaptors available for all types of boats

Write today for full particulars and names of nearest dealer.

Mesh on seat back cushions the shoulders comfortably.

KABIN KRAFT

Vacation Camps on Moxie Lake
Troutdale Cabins,
Troutdale, Me.

Business Office
Kabin-Kraft Service
Lake Moxie, Maine, P. O.

—CARTERCRAFT—

Sensational New V-Bottom Outboard Speedster—steel and wood construction. A safe, durable 12 ft. boat at $110.00 f. o. b. Albion.

Write today for complete specifications.

DARROW STEEL BOAT COMPANY
710 CLINTON STREET ALBION, MICH.

Truscott Sled Speedster

No ONE can BEAT the enjoyment of building your own substantial and safe 20-mile SPEED boat. Requires but little spare time. We furnish the materials, machined ready to fasten **29.75**

Also furnish this boat complete at extremely low price.

TRUSCOTT BOAT COMPANY St. Joseph, Mich.

KALLUSCH-BUZABOUT

A NEW four-passenger, all mahogany runabout for outboard motors—with speeds up to 30 M.P.H. Brass and copper fastened; length, 16 feet; beam, 52 in. Double cockpit, forward drive if desired. A beautiful boat, with speed, safety, comfort, and one you will be proud to own.

Priced at only $285.00

KALLUSCH BOAT AND ENGINE CO.
Sodus Point, N. Y.

Pastor Stop Watch

Split Second Timers

No. 100 Yacht Timer. Price....$15.00

No. 3 1/5th second, 30-minute register, Timer. Price.....$12.85

No. 7 1/10th second, 15-minute register, Timer. Price.....$13.50

No. 9 1/5th second, 30-minute register, small second hand, double-split Timer. Price.....$35.00

Fully guaranteed. Either P.P. or C.O.D.

Write today to

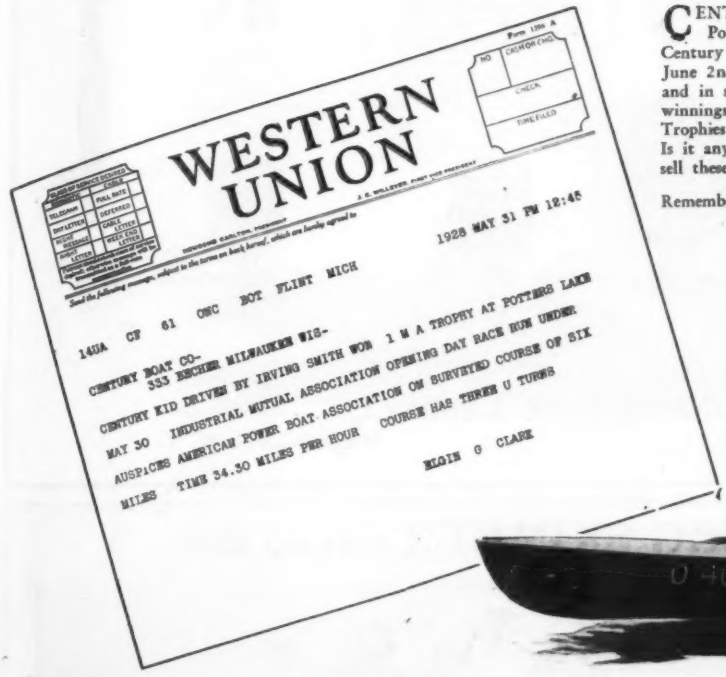
The Sterling Stop-Watch Co., Inc.
No. 15 East 26th St., New York, N. Y.

Made in U. S. A. Nickel. Unbreakable crystal. Shows seconds and fifths of seconds. Stop attachment independent of the watch movement. Most serviceable stop watch on the market. Price, $10.00, postpaid.

Advertising Index will be found on 3rd last page

Dealers!

Century Boats Are Fast Sellers and Race Winners


WESTERN UNION

1928 MAY 31 PM 12:48

14UA CF 61 CNC BOT FLINT MICH

CENTURY BOAT CO-
335 BECHER MILWAUKEE WIS-

CENTURY KID DRIVEN BY IRVING SMITH WON 1 M A TROPHY AT POTTERS LAKE MAY 30 INDUSTRIAL MUTUAL ASSOCIATION OPENING DAY RACE RUN UNDER AUSPICES AMERICAN POWER BOAT ASSOCIATION ON SURVEYED COURSE OF SIX MILES TIME 34.30 MILES PER HOUR COURSE HAS THREE U TURNS

KLEIN G CLARE

CENTURY KID won six-mile Decoration Day race at Potters Lake, Michigan, average speed 34.3 m.p.h. Three Century Travelers entered Chicago to Milwaukee Marathon June 2nd, two finishing second and third, other boat leading and in sight of finish line when fuel supply ran out. These winnings and other victories together with a long list of Trophies have fallen to Century Kids and Century Travelers. Is it any wonder then that wide-awake dealers find it easy to sell these boats. *Get our attractive dealer proposition today.*

Remember while Century boats are winners they are not mere racing shells, but are strongly constructed boats of the finest materials. Built not for one season's use, but for many years of hard service. Century boats are sold complete, ready for the water and the prices are low. When writing for dealer offer give an estimate of number of boats you can handle.

CENTURY KID
America's finest outboard hydroplane and the strongest of its weight. Length, 13 ft. 6 in. Beam 46½ in. Mahogany planked, brass screws and copper clinch fastenings. Double aeroplane type cockpits. Forward steering control and motor drip pan are standard equipment.

MASS PRODUCTION AT THE CENTURY PLANT

Assembly line where Century Kids are being planked with smooth, natural mahogany, carefully laid in plastic cement.

Century Kids and Travelers are carefully inspected before being decked and finished in four coats of finest spar varnish.

CENTURY TRAVELER
An exceptionally fast, 17-ft. mahogany runabout seating six adults. Speed 25 m.h.p. with driver, 20 m.h.p. with 4 to 6 people, using Class C motor.

A large number of Century Boats are stocked for immediate deliveries.

CENTURY BOAT CO.

336 Becher Street

MILWAUKEE, WIS.

Advertising Index will be found on 3rd last page

Speed · Beauty
Seaworthiness

CUTE-CRAFT

FALL RIVER,
MASSACHUSETTS

CUTE-CRAFT

Popularized by Their Performance

CUTE-CRAFT Standard Model
Length, 8½ feet. Beam, 48 inches.

CUTE-CRAFT was in the fore-rank of record makers last year and again this year these sensational boats are outstanding record makers. At the Worcester, Mass., Regatta, on Lake Quinsigamond, five new world's A. P. B. A. records were established by Cute-Craft.

1928 CUTE-CRAFT RECORDS

1-Mile Class B, Free-for-All, Mile Trial 35.66 m.p.h.
2-Mile Class B, Free-for-All, in Competition 30.25 m.p.h.
2-Mile Class B, Amateur, in Competition 28.35 m.p.h.
2-Mile Class A, Free-for-All, in Competition 23.841 m.p.h.
2-Mile Class A, Amateur, in Competition 22.15 m.p.h.

The special Cute-Craft Sea Horse model shown above was the second boat to finish in the Boston to New York Race, June 16th, finishing within a few minutes after the first boat. There were thirty-six starters in the race and ten finished the gruelling contest of about 250 miles distance. The Cute-Craft Sea Horse, a family runabout, is 14 feet long and has a 48-inch beam. It seats four people.

The Cute-Craft Magnum got off 26 minutes after the starting gun, and ran out of fuel within ½ mile of the finish line, 20 minutes ahead of the nearest contender.

If you want a seaworthy and fast boat you will have no other than a Cute-Craft. Write today for descriptive literature.

CUTE CRAFT COMPANY, 154 N. Main Street, Fall River, Mass.

DISTRIBUTORS:

Northeastern New York State:
ALBANY BOAT CORP.
Watervliet, N. Y.

Southern New Jersey:
CHAS. G. ALEXANDER, JR.
Avon-By-The-Sea, N. J.

New England Territory:
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Latvia, Europe

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Advertising Index will be found on 3rd last page

So VERY Much More than SPEED alone

Dealers Interested in Unallotted Territory for 1929—Write Now

LOCKWOOD "ACE"

LOCKWOOD "CHIEF"

LOCKWOOD
OUTBOARD MOTORS

Lockwood Motors are best known perhaps for their flashing speed. Race after race has stamped them as today's fastest Motors. And the interesting thing about it all is that Lockwood **does not** build racing Motors. All Lockwood records have been made with stock service models—the kind you, yourself, will get if you buy a Lockwood. Here are just a few of the recent remarkable records of the new Ace and Chief.

—**Official time-trial records: The Ace,** Class A, at 27.163 miles per hour, raised its class record 72%. **The Chief,** Class B, at 33.543 miles per hour set the highest official speed record for motors of any size.

—At Miami, Fla., Lockwoods took 1st, 2nd and 3rd in amateur Class B, and 1st in free-for-all Class B.

—From Albany to New York, 133 miles, 1st and 2nd in Class B, beating many Class C entries.

—At Birmingham, Ala., 1st and 2nd, Class B.

—At Hendon, England, 1st in Class B.

—At Savannah, Ga., 1st and 2nd, Class B.

—At Oklahoma City, Okla., 1st, 2nd and 3rd in Class A; 1st and 2nd, Class B; 1st, Class C, and 1st in dealers' race, Classes B and C.

—At Bellingham, Wash., 1st, 2nd, 3rd in Class B, and 2nd and 3rd in Classes C and D.

These are every-day service motors; easy to start; perfect throttle control; moderate compression; strong and durable in every part; and every one equipped with the patented exclusive

Lockwood Pilot
which "takes hold of the Motor when you let go"

This one simple device is easily worth $50 of any man's money. In fact, Lockwood owners tell us they would never again operate any motor that did not have this "unseen hand." You cannot appreciate just how VERY much this one feature means until you have tried it.

In other ways, Lockwood Outboard Motors give so VERY much more than SPEED alone. In the highly developed, oversize Eisemann Flywheel Magneto. In the perfected carburetor and control. In the new scientific stream-line and the pumpless cooling system.

Write for the new Lockwood Catalog which tells the whole story of Power, Speed, Control, Durability, Comfort and Big Value.

LOCKWOOD MOTOR CO., 81 S. Jackson St., Jackson, Mich.

Dealers and Distributors almost Everywhere

For the Province of Quebec
FRED I. MITCHELL,
633 Notre Dame, E., Montreal, Quebec

For the Province of Ontario
SYCO SUPPLY CO.,
230 Bay St., Toronto, Ontario

For the Province of British Columbia
McQUILLIN, LTD.,
502 Pacific Coast Fire Bldg., Vancouver, British Columbia

(58)

AUTOPULSE

(PATENTED)

Your Outboard Boat

for Long Distance Races and Extended Cruises

THE installation of one or two Autopulse fuel pumps on your outboard boat to feed gasoline from an auxiliary or storage tank to the motor not only simplifies your fuel problem for long distance races but protects you against the hazard of fire which is always present where gasoline is carried in cans for refilling the motor tank. The sponsors of the Boston to New York Outboard Marathon Race, recognizing this hazard, made it a hard and fast rule that the method of feeding gasoline from the reserve tank to the motor shall be permanently piped. This not only insures safety but also keeps the boat free of gasoline drippings.

It is easy to install an AUTOPULSE in the fuel line. It is inexpensive and assures an ample supply of clean filtered fuel reaching the carburetor at all times, regardless of speed, distance or water conditions.

Approved by Underwriters Laboratories

Used by all leading motor manufacturers, boat builders and racing drivers.

AUTOPULSE is a small magnetic fuel pump that consumes very little current. It delivers clean gasoline from the reserve tank by the pumping action of a brass bellows, which is expanded by an electro-magnet. Each unit has a maximum capacity of 8½ gals. per hour—6 gals. is the rated capacity. One unit will supply any outboard motor, but some drivers prefer to use a duplex unit to make doubly sure.

AUTOPULSE used by Winners of these Races

ALBANY to NEW YORK

Baby Olds, winner Albany to New York Outboard Race—130 Miles.

MILWAUKEE to CHICAGO

Lady Sparton, winner Milwaukee to Chicago Outboard Marathon.

Read this Excerpt from Rules of Boston to New York Marathon

... shall be secured

j The main gasolene tank or tanks in all boats shall be permanently strapped or shored in place in a manner satisfactory to the Inspection Committee The method of feeding gasolene from this tank or tanks to the carbureter or motor tank shall be permanently piped. This is extremely important as the haphazard way in which gasolene is often times handled under poor conditions is liable to cause fire Dumping of gasolene from an auxiliary can into the motor is prohibited. The auxiliary cans must be of the ...

© Underwood & Underwood

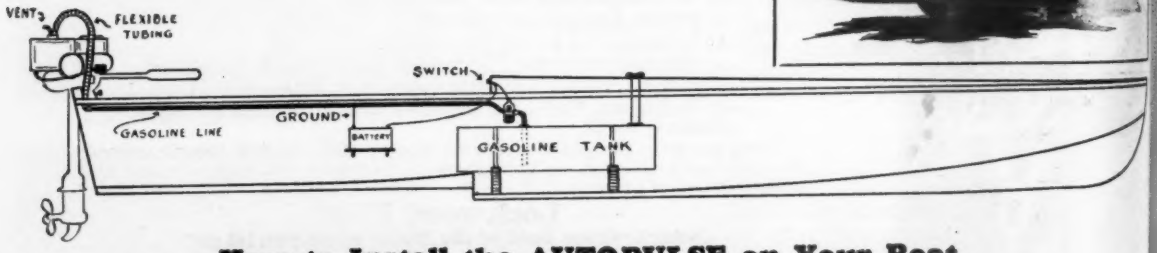
Endorsed by Builders of CUTE-CRAFT Outboard Boats

June 11th, 1928.

For long distance outboard motor boat racing the problem of carrying sufficient fuel for the race and transferring it from the reserve tank to the motor is solved by your Autopulse. The writer has driven Cute-Craft boats in several long races and from his personal experience with automatic fuel pumps and pressure pumps he finds that none surpasses the Autopulse for efficiency and absolute dependability.

It might interest you to know that we are recommending the Autopulse to Cute-Craft owners not only for use in racing contests but also as a means of increasing the cruising radius on their boat without frequent refuelling.

CUTE CRAFT COMPANY
A. T. Bufinton (signed)



How to Install the AUTOPULSE on Your Boat

Simply connect soft copper or flexible (braided) metallic tubing from the reserve tank to the Autopulse Pump and continue this tubing to a point near the motor; from here a connection of flexible metallic tubing must be used to allow for the turning of the motor when steering. Do not use rubber tubing. The gasoline may be fed into the regular motor tank at the filler cap, using an electric switch to turn on the Autopulse when the tank needs filling.

If preferred, an entirely automatic installation can be made by feeding the gasoline directly to the carburetor, using a T connection in the fuel line between the petcock and the carburetor. When the carburetor fills and the float valve closes, the pressure in the gasoline line breaks the electric circuit and the pump stops operating, starting automatically the instant more gas is needed. With this arrangement the motor tank can be kept full as a reserve for emergencies.

A six volt dry battery should operate the Autopulse for a full season. Ground one side of the battery anywhere on the tubing and connect the other side to the Autopulse terminal, cutting a switch in this line if the gasoline is fed to the motor tank.

Write today for descriptive literature and name of nearest AUTOPULSE dealer

IRELAND & MATTHEWS MFG. CO.

1600 Beard Avenue
DETROIT, MICHIGAN

Advertising Index will be found on 3rd last page

NEW WORLD'S RECORD

38.436

MILES PER HOUR
JUNE 4th

FOR the third time this year, Evinrude Speeditwin breaks all world's speed records, by averaging 38.436 M. P. H. for six one-mile heats, at Balboa, Calif., June 4. Boat, Fire Fly owned and driven by Charles Holt, Los Angeles amateur, powered with strictly stock model, 16 H. P. Evinrude Speeditwin. Auspices So. Calif. Outboard Motor Boat Association and A. P. B. Association.

++

Duplicating its triumph on the Hudson in the great Albany to New York Race, Evinrude Speeditwin, driven by 15-year-old Mary A. Richardson captured the Milwaukee to Chicago Marathon, making the 96 mile run over the rough water of Lake Michigan in 4 hours, 2 minutes, 22 seconds and finishing 39:29 minutes ahead of any other make motor.

++

At Worcester, Mass., on May 30, Evinrude Speeditwins again demonstrated their championship speed. Before over 15,000 spectators, Commodore H. Ross Maddocks, driving a genuine stock model Evinrude Speeditwin, took first in Class C Free-for-All, Class C Novice Race and the gruelling 10 mile Grand Free-for-All. Speeditwins also placed second and third in all of these events and also fourth in the Class C Novice Race, in addition to placing first, second and third in Time Trials. Auspices New England Outboard Motor Association, and American Power Boat Association.

++

Friction-Reducing Ball and Roller Bearings on Connecting Rods, Crankshaft, Drive and Propeller Shafts — an important, original and exclusive Evinrude Speeditwin and Fastwin feature for longer life and greater speed.

96 MILES
MILWAUKEE TO CHICAGO, JUNE 2
First, Second, Fourth *and* Sixth

AT WORCESTER, MASS. **1st. 2nd. 3rd.**

CLASS C. FREE-FOR-ALL
10 MILE *Grand Free-for-all*
(1st-2nd-3rd-4th)
CLASS C. NOVICE

4 Twin Cylinder Models
Speeditwin—16 H.P. 85 only lbs. 6 to 40 M.P.H.
Fastwin—12 H.P. only 69 lbs. 5 to 30 M.P.H.
Fleetwin—6 H.P. only 55 lbs. 4 to 25 M.P.H.
Sportwin—2½ H.P. only 44 lbs. 3 to 13 M.P.H.
Write for 1928 Evinrude Year Book.

EVINRUDE MOTOR COMPANY
1118 27th Street — Milwaukee, Wis.

EVINRUDE

EVINRUDE FACTORY BRANCHES—SALES AND SERVICE:

512 Second Avenue, S.	Minneapolis, Minn.
128 West Bay Street	Jacksonville, Fla.
115 East 23rd Street	New York City
259 Atlantic Avenue	Boston, Mass
117-119 Broadway	Oakland, Calif.
124 Second Street	Portland, Ore.
79 Columbia Street	Seattle, Wash.
6304 East Jefferson Avenue	Detroit, Mich.
84 King Street, W.	Toronto, Ont., Canada

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LACONIA

SpeedSter — SportSter

High Quality Outboard Runabouts

Safe — Fast — Mahogany Constructed

Luxuriously Fitted — Completely Equipt

Immediate Deliveries Now

The SpeedSter
Length, 12' 4". Beam, 48". Weight 150 lbs.

YOU need not wait for your Laconia outboard runabout. Deliveries are being made the same day orders are received.

Why delay the purchase of your Laconia SportSter or SpeedSter. Owners are telling us how agreeably surprised they are with the wonderful speeds and perfect safety of these beautiful boats. Order yours today!

Both the Laconia SpeedSter and SportSter are mahogany built with double planked bottoms; brass fastened throughout; upholstered for comfort in a manner heretofore unknown in small craft; fully equipped with lights, deck hardware, fire extinguisher, whistle, fender, etc. The SportSter is fitted with a handsome windshield and motor car type steering wheel. There's nothing else to buy except the motor.

Write now for further particulars and name of nearest Laconia dealer.

The SportSter
Length, 15'11". Beam, 52". Weight, 250 lbs.

LACONIA CAR COMPANY

LACONIA, NEW HAMPSHIRE

Manufacturers of Wood and Metal Products for Nearly a Century

FLASHING SPEED—SAFELY!

IN THE YEAR AHEAD ALLOY STEP HYDRO

The SLIPPER

Experts predict that the gasoline craft of the future will be metal—not wood. The Slipper is the metal boat of the future—ready for you *now*.

Amid the confusion of types and kinds and names and stunts offered an enthusiastic public the "Slipper" stands out like a beacon on a dark night. It is as far ahead of the ordinary boat as the modern liner is ahead of the old time wooden tramp.

Special light metal alloy gives a strength and rigidity impossible in a wooden boat. The Slipper can't warp, shrink, leak nor absorb water so you have consistent performance always—and the "Slipper" is a life-time boat. Severest tests in smooth and open water; usage that no ordinary boat could hope to withstand, leave this sturdy craft unharmed. One unusual feature is the patented folding fin, controlled from the driver's seat, which makes beaching an easy matter.

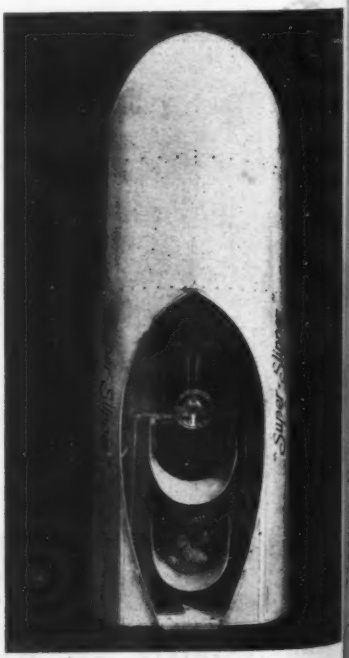
Choosing your outboard is as simple as A.B.C. when you compare the Slipper with the rest. The supreme thrill as you flash by the others in the race or the satisfaction of swift, safe, dependable transportation for yourself or the youngsters in the family are yours when you become the proud owner of a "Slipper."

Write now for interesting folder with complete details.

Midget Slipper Outboard Motor Boat—Single step hydro, 8′ by 48″ beam, weight 55 lbs., self color finish. Wood flooring over alloy ribs. Collapsible fin controlled from operator's seat. **Price $98.00 F.O.B. Buffalo, N. Y. Crating $12.**

Standard Slipper Outboard Motor Boat—Single step hydro, 11′ 6″ by 48″ beam, weight 95 lbs., self color finish. Wood flooring over alloy ribs. Collapsible fin controlled from operator's seat. **Price $195.00 F.O.B. Buffalo, N. Y. Crating $15.**

Super Slipper Outboard Motor Boat—Single step hydro, 11′ 6″ by 48″ beam, weight 120 lbs., self color finish, two removable bucket seats, 10″ aluminum steering wheel, forward throttle control, floor covering alloy ribs. Collapsible fin controlled from operatr's seat. **Price $245.00 F.O.B. Buffalo, N. Y. Crating $15.**



ALLOY BOAT CO.
Manufacturers of
OUTBOARD MOTOR BOATS
190 ELK STREET
BUFFALO NEW YORK

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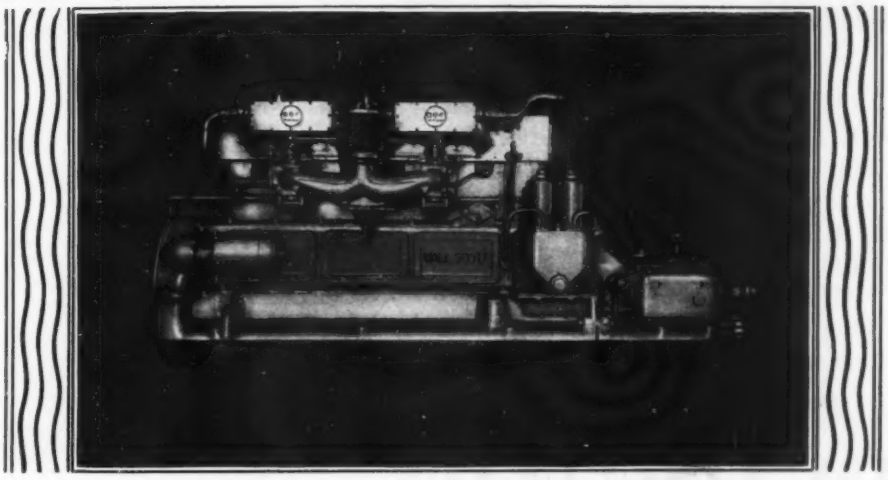
REMARKABLE

marine engine, is the Hall-Scott



The lakes and sea-coasts of America are spangled with swift cruisers and stately yachts, powered by Hall-Scott engines. One has a feeling of utter dependability in their unfailing performance; a consciousness of their silent, redoubtable power. ¶ Designed by recognized masters and built with micrometric precision, Hall-Scott engines have that desired quality of getting you where you are going. A craft, powered by Hall-Scott, is one in which speed and smooth operation may be taken for granted.

The "NAVIGATOR", owned by Mr. Clarkson Cowl, New York. Length, 99 ft. over-all; beam, 18 ft.; draft, 4 ft.; speed, 13½ m.p.h. Repowered with twin Hall-Scott Reduction-gear Motors, each of 175 h.p.

HALL-SCOTT

Motor Car Company

217 WEST 57TH STREET, NEW YORK CITY

WILMINGTON, CAL.; SEATTLE, WASH.; BERKELEY, CAL.; DETROIT, MICH.; PHILADELPHIA: Marine Equipment Supply Co., 116 Walnut St.; BOSTON: Noyes Marine Sales Co., 1037 Commonwealth Ave. HOFFER-BEECHING SHIPYARDS, LTD., VANCOUVER, B. C.

A DIVISION OF AMERICAN CAR AND FOUNDRY MOTORS COMPANY.

Boston to New York Race

(*Continued from page* 160)

more perfect.

Many had claimed in advance that the course was to hazardous for small outboards to negotiate but the results showed that so well were the competing boats and crews prepared and so thorough were the committee in their requirements and inspections that not only did the boats safely make the run but all the competitors seemed to enjoy it as well. Except for being a little tired with their fifteen hours of driving, there were no ill effects. Most of the boys would have been ready to start in a return race, after a few hours sleep, had one been scheduled.

Nearly all of the boats were manned by crews of one, although they were permitted to have more on board if they so desired. The rules permitted only seaworthy boats to enter and the spirit of the rules was more than lived up to. Every boat was almost completely decked over with the exception of the driver's seat. Spare parts, extra batteries, Coston signals, fixed fuel tanks, permanent feed pipes, flags for distress signalling, a compass, a whistle and fog horn, life saving devices, etc., were required to be carried on board.

The co-operation of the Coast Guard was one of the most striking features of the race. Three destroyers followed the racers and some twenty 75 foot Coast Guard motor boats were stationed at definite points, about 10 miles apart, along the route. Radio and wireless telephone communication was established between the patrol boats as the racers passed, so that each Coast Guard boat at all times was thoroughly aware of the progress of the boats and the race. Contestants were required to pass close to and report to the patrol boats on the various stations and should a boat fail to report on schedule time the Coast Guard started a search.

The weather during the progress of the race was ideal. During the first hours the wind blew from the northwest causing a heavy following sea in the leg from Boston to the Canal, a distance of slightly less than 50 miles. This part of the race was decidedly the roughest. After the boats reached the open ocean the wind almost entirely died down. As the boats entered Long Island Sound, it shifted to a gentle southwest breeze but not of sufficient strength to be alarming. The last 50 miles was made on water of almost glassy smoothness.

Before the Canal was reached, two Sea Sleds, one a 13 footer and the other 16 feet in length had taken the lead. These were not the fastest boats in the fleet but the rough going seemed to be to their liking. Most everyone expected that as soon as smooth water was reached that other craft would take the lead away, but the Sea Sled Corker, driven by C. P. Stevens, of Albany, stayed out in front until within a few miles of the finish line. Al Buffinton, driving Magnum Cute Craft, a most wonderful little ship, went into second place at New Haven, passing J. L. Chapman, driving another Sea Sled. Mr. Buffinton elected to follow the Long Island Shore while the two Sea Sleds kept to the other side of the Sound. Off Port Jefferson Magnum Cute Craft was reported in the lead which she held until within a few miles of the finish when a broken steering gear caused this boat to stop for repairs. Before these could be made, Mr. Stevens had again taken the lead and crossed the finish line at 6:35:30 P.M. Ten minutes later Cute Craft finished. Six minutes behind came Mr. Chapman bringing his Sea Sled in third.

It is most remarkable that the first three boats should all finish within a period of sixteen minutes.

H. R. Maddocks, driving a Baby Whale, came in fourth. This boat probably would have finished in a much better position except for steering gear trouble. At the very start the steering wheel broke and an auxiliary tiller was rigged. This soon broke and Mr. Maddocks was required to steer the entire distance without wheel or tiller. His pluck and stick-at-it qualities were much admired and commented on by all.

The first four boats to finish were all powered with Class C Evinrude motors.

The first Class B boat to finish was manned by the old racing salt, J. E. Wilkinson, of Fall River, Massachusetts, driving a Lockwood powered Lyman Sea Skiff. Mr. Wilkinson would also have finished much earlier than he did except that he ran out of gas about two miles from the finish line. Much valuable time was consumed in locating a fresh supply on the strange waters of the East River after dark.

The next two boats in were built by the Pigeon Hollow Spar Company of East Boston, Massachusetts. One was powered with an Evinrude motor and the other with a Class B Elto motor.

Two 3-Star Pigeon boats started and both of them finished. One of them had a Class C motor and the other a B motor. Captain William J. Snadicki, who drove the Class C motor, stepped ashore at Flushing, Sunday morning with a smile on his face and said that he would have done much better with his Pigeon boat except for trouble he had experienced with dirty fuel. First of all he arrived at the Victory plant at Boston

(*Continued on page* 196)

Absolute Dependability

The designer wants to know that the starting, lighting and ignition performance of his motor boat can be depended upon *absolutely*—therefore he chooses Auto-Lite.

Through millions of daily tests on millions of motor boats and motor cars, Auto-Lite has proved itself the leader in reliable performance. Today Auto-Lite on a motor boat or motor car is an indication that quality materials have been used throughout .... THE ELECTRIC AUTO-LITE COMPANY ..... OFFICE AND WORKS: TOLEDO, OHIO.

Also Makers of DéJon

Auto-Lite

Starting, Lighting & Ignition

Boston to New York Race

(*Continued from page* 194)

where the boats were housed the night before the start and found that his fuel tank had been filled with gas but no oil had been put in. Consequently it was necessary to pump all of the gas from the tank and refuel it with the proper mixture of gas and oil. As a result of this, the boat did not get away until twenty-five minutes after the starting gun had been fired.

Before reaching the Canal, the engine went dead and it was found that the gas line was clogged. Captain Snadicki took oñ the pipe line and found that he could not get any air through it. It was found plugged solid full with rubber and slime where the gas had eaten the rubber tube causing the autopulse to cease to work. The motor had to be taken off the stern and emptied of all the fuel, taken apart and cleaned and a new length of rubber tubing put on before the boat could get under way again. This experience happened not only once during the trip, but five times.

A complete summary of the first ones in follows:

Finish, Flushing, Long Island

CLASS C

			Time of Finish
Tenth	08-186		
Entire	Race	C. P. Stevens	6-35-30 P. M. Saturday
First	08-599	A. Buffinton	6-45-56 P. M. Saturday
Second	08-151	J. L. Chapman	6-51-27 P. M. Saturday
Third	08-207	H. R. Maddocks	8-37-15 P. M. Saturday
Fourth	08-125	J. E. Wilkinson	11-40-00 P. M. Saturday
Fifth	08-200	R. W. Pigeon	9-47-45 A. M. Sunday
Sixth	08-135	W. M. Harris	11-03-00 A. M. Sunday
Seventh	08-182	S. Koteles	7-28 P. M. Sunday
Eighth	08-208	E. Staker	11-33 P. M. Sunday
Ninth	08-153	M. H. Eldridge	1-55 A. M. Sunday

Time of Start, 4.30 A. M., Saturday

Distance, 250 miles, approximately.

CLASS B

First .....J. E. Wilkinson.....08-200
Second .....W. M. Harris.....08-182

Around Staten Island Race

(*Continued from page* 162)

Lynch was personally present assisting the committee at the finish and also by presenting the borough president's trophy to the winner of the race. In fact, the interest of the borough president in outboard racing is strong enough to own a Sea Sled and a friend drove this in the race.

Of the eighteen boats which started, only twelve completed the trip and the first boat to negotiate the entire course was Brewster Baby Olds owned by D. W. Brewster. She succeeded in making the entire circuit of the Island in one hour and fifteen minutes and some seconds which was remarkably fast for the weather conditions prevailing. This boat was powered with a class C Evinrude engine and made a non-stop run without difficulty.

The prizes which were awarded were particularly valuable and are listed below:

WINNER PRESIDENT LYNCH TROPHY

S-24, Baby Olds; Driver, D. W. Brewster; Owner, D. W. Brewster

Boat built by Brewster—Evinrude Motor—time 1.15.47

WINNER—CLASS C

1st—Brewster—Baby Olds, built by Brewster—motor, Evinrude, time 1.15.47

2nd—A. L. Buffinton—Cute Craft Herself—Cute Craft—Evinrude, time 1.18.03

3rd—J. C. Smith—Fairchild Aero—motor, Evinrude, time 1.26.57

WINNER—CLASS B

1st—J. C. Rolfe—Baby Whale—motor, Lockwood, time 1.24.28

2nd—T. Roberts—Baby Playmate—Wheeler Shipyard—motor, Lockwood, time 1.30.16

WINNER OF SEA SLED

H. Hinson—Miss Richmond—Sea Sled—time 1.32.09

WINNER OF EVINRUDE MOTOR

D. W. Brewster—Baby Olds, built by D. W. Brewster—time 1.15.47

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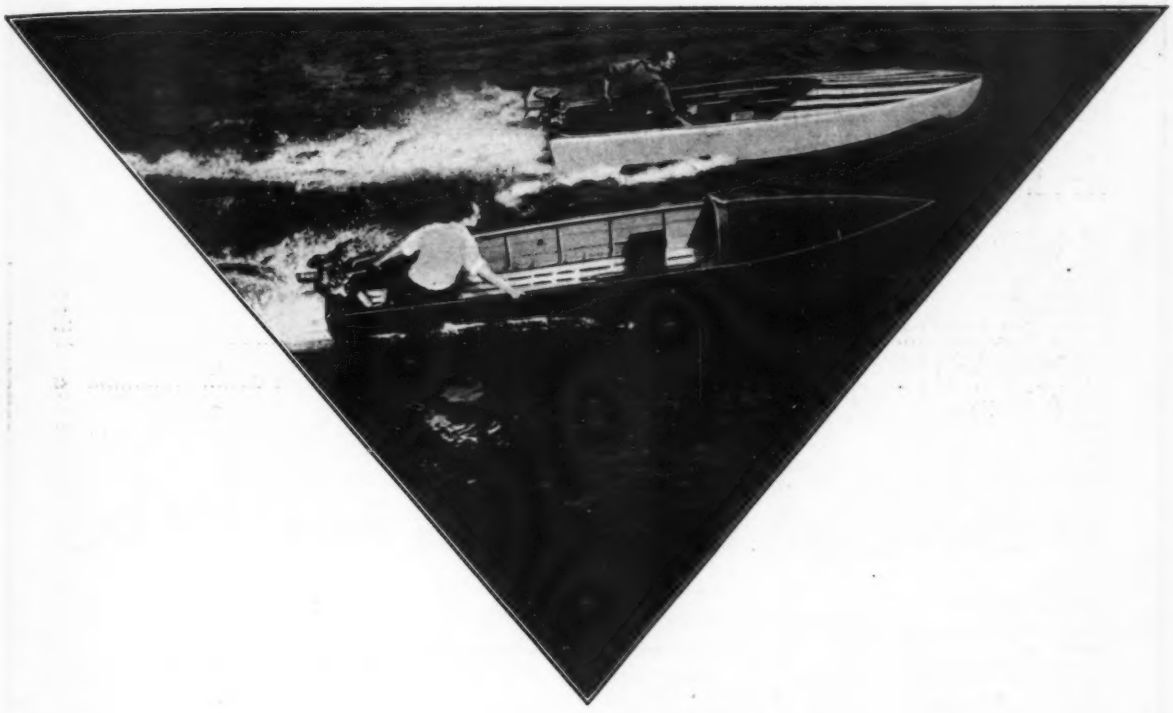
These batteries win races



EVEREADY COLUMBIA Dry Batteries

–they last longer

ELTO recommends Eveready Columbia Dry Batteries for use on the powerful, peppy Elto outboard engines. These batteries make possible Elto's famous quarter-turn start, for they produce sure-fire, hot sparks at all speeds. No spinning needed to start, and no missing at any speed whatever.

Most motor-boat owners use the Eveready Columbia Hot Shot. It comes in three sizes, 6, 7½ and 9 volts. Each in a water-proof steel case with convenient carrying handle. Battery cannot be short circuited by water. Case is so sturdy it will stand long months of knocking about. And the long-lasting electrical energy inside is good for hundreds of hours of steady, never-miss running.

NATIONAL CARBON CO., INC.

New York UCC San Francisco

Unit of Union Carbide and Carbon Corporation

MoToR BoatinG Advertising Index

Prices quoted in Advertisements are subject to change without notice

34,100

copies of this issue are being printed. This is 5,600 more than last July.

In volume of advertising this is the largest July issue in MoToR BoatinG's history.

MoToR BoatinG is the all around leading magazine for yachtsmen. It is first in editorial quality, number of readers and advertising volume.

Advertising forms for the August number close July 10th

All others are Left in its Wake—

DISTRIBUTORS:

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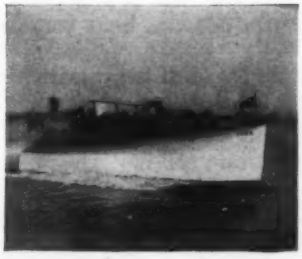
West End Boat Yard

'Way ahead of all the rest—that is the *Corsair Cruisader.* Ahead in design—because it was created by Eldredge-McInnis, famous marine architects, to combine the most desirable features of the fast runabout and the comfortable cruiser. Ahead in construction—because it must uphold the guarantee of the *Corsair* name



which it carries. Ahead in price—because it is built on a standardized production basis which gives you the equal of a custom-built craft at half its cost.

See the *Cruisader*—ride in it—or write today for full information on this remarkable boat and its companion craft, the *Corsair Cruiser.*

CHENEVERT & COMPANY

1030 BUHL BUILDING
DETROIT MICHIGAN

CORSAIR CRUISERS

FORTY-TWO FEET
TWO CABINS
DECK HOUSE
FORWARD COCKPIT
TWIN SCREW

FAIRFORM *FLYER*

An Express Cruiser of Unusual Character

FAIRFORM FLYER is a 20-mile express cruiser having all the character of a custom built boat of exclusive design. Fast, exceptionally seaworthy, strongly constructed, beautifully finished and completely equipped, no custom builder would produce this boat for less than twice its price.

The design and arrangement are based on twenty years of actual yachting experience, at the same time employing the newest ideas and improvements in marine architecture. Construction follows the highest standards, with African mahogany planking, double planked bottom, brass screw fastened throughout, and the best materials and fittings the market affords. Every part is fabricated in a modern plant equipped with every facility for quality and economy in production.

For commuting, offshore cruising, fishing, living aboard or for extended trips, you could not find a more comfortable or able boat.

Write today for complete illustrated catalog and prices. Appointments can be made for demonstrations at Atlantic Coast points this summer if arranged without delay.

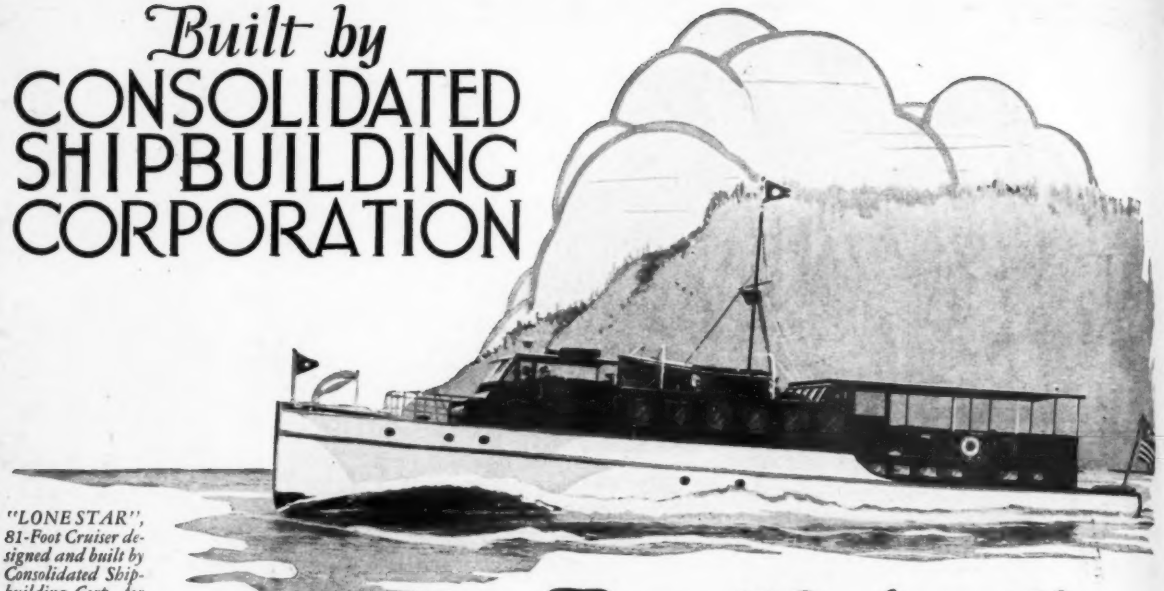
HUCKINS YACHT CORPORATION

JACKSONVILLE, FLORIDA

Advertising Index will be found on 3rd last page

MoToR BoatinG, August, 1928. Volume XLII. No. 2. Published Monthly at 57th Street at Eighth Ave., N. Y., U. S. A., by International Magazine Co., Inc. Yearly subscription price: United States, $3.00; Canada, $3.00; Foreign, $4.00. Entered as second-class matter April 15, 1925, at the Post Office at New York, under the act of March 3, 1879. (Printed in U. S. A.)

Built by CONSOLIDATED SHIPBUILDING CORPORATION



"LONE STAR", 81-Foot Cruiser designed and built by Consolidated Shipbuilding Corp. for Mr. George Bourne.

Beautified with EDWARD SMITH YACHT WHITE

HERE is still another evidence of the fine quality of Edward Smith Marine Paints and Varnishes—the Consolidated Shipbuilding Corporation uses these well-known products in finishing the beautiful yachts for which they enjoy a nation-wide reputation.

The "Lone Star", shown on this page, is just one of the many palatial yachts on which these great ship-builders have employed the finishing materials produced by this company.

In this instance the gleaming top sides have been produced with Smith Yacht White . . . a product that is universally known as the Whitest White made . . . a white that won't turn yellow . . . a white that can be scrubbed and scrubbed without deterioration . . . a white that wears down gradually and evenly and can be repainted without the necessity of scraping prior to the repainting job.

Consolidated is one of the many great ship-building companies which have found over a long period of years that Smith Marine Products can be relied upon to give fine finishes that will wear indefinitely in the face of the most rigorous conditions.

There is a Smith Product for every marine purpose. Sold by most good marine dealers. Literature and color cards gladly submitted upon request.

FAMOUS SMITH MARINE PRODUCTS

Aquatite Spar—A hard, fossil gum varnish, not affected by water or climatic changes.

Spar Coating—A spar varnish in the old seafaring meaning of the word. Made from hard fossil gums. Extremely brilliant.

4-Hour Marine Varnish—An all-around marine varnish. Flows on easily; dries hard in 4 hours.

Yacht White—The whitest white made. Semi-Gloss. Can be washed and scrubbed. Won't turn yellow.

Yacht Deck Buff—Exclusively for this purpose. Flows smoothly. Dries quickly. Won't whiten, chalk, bleach or crack.

"THERE IS A SMITH PAINT OR VARNISH FOR EVERY PURPOSE"

EDWARD SMITH & COMPANY

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Manufacturers of Marine Paints and Varnishes Since 1827